

# QUALITY ASSURANCE REVIEW FOR SAMPLES ASSOCIATED WITH THE GENERAL ELECTRIC COMPANY HUDSON RIVER PCBs SITE PHASE 2 REMEDIAL ACTION MONITORING PROGRAM # P2RAMP-PACE-FM-111

July 17, 2018

Prepared for:

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# **TABLE OF CONTENTS**

# **Executive Summary**

# Introduction

| Section 1 Quality Assurance Review |
|------------------------------------|
|------------------------------------|

- A. Deliverable Review
- B. Procedural Review
- C. Data Usability Evaluation
- D. Summary

# Section 2 Analytical Results

- A. SDG 40148598
- B. SDG 40151542
- C. SDG 40151619
- D. SDG 40157940

# **Section 3** Electronic Data Verification Reports

# Section 4 Data Support Documentation

- A. SDG 40148598
- B. SDG 40151542
- C. SDG 40151619
- D. SDG 40157940

# Section 5 Case Narratives and Chain-of-Custody Records

# **Section 6** Project Correspondence

# **Executive Summary**

This quality assurance (QA) review (# P2RAMP-PACE-FM-111) was performed on polychlorinated biphenyl (PCB) analytical data in Sample Delivery Groups (SDGs) 40148598, 40151542, 40151619, and 40157940. The PCB data were generated in accordance with standard operating procedures (SOPs) for homogenization and preparation of tissue samples (SOP S-GB-L-009-Rev.01), extraction by SW-846 Method 3541 and determination of percent lipids (SOP S-GB-O-068-Rev.01), and the analysis for PCB Aroclors using SW-846 Method 8082A (SOP S-GB-O-067-Rev.01) included as Attachments 1, 2, and 3, respectively, of the Hudson River Phase 2 Remedial Action Monitoring Program 2017 Corrective Action Memorandum No. 15 (February 2018) to the Hudson River PCBs Superfund Site Phase 2 Remedial Action Monitoring Quality Assurance Project Plan (Phase 2 RAM QAPP, May 2012). These 43 samples were collected on April 18, June 12 and 13, and August 28, 2017, as part of the Hudson River PCBs Site Phase 2 Remedial Action Monitoring Program and were analyzed by Pace Analytical Services, LLC (Pace), in Green Bay, Wisconsin.

All samples included in SDGs 40148598, 40151542, 40151619, and 40157940 have been validated and are identified on Table 1 of this QA review. Environmental Standards, Inc. based the validation on an evaluation of the deliverable provided by the laboratory for SDGs 40148598, 40151542, 40151619, and 40157940.

The data quality for the PCB results was acceptable; however, the following qualifications were made:

- All PCB results reported at concentrations between the sample-specific method detection limit and reporting limit (adjusted for dilution factors and sample weight) should be considered estimated.
- The reported positive results for total PCBs summed from estimated individual Aroclor concentrations should be considered estimated.

This QA review identified a few deliverable and procedural issues, which did not result in qualification of data.

## Introduction

This quality assurance (QA) review (# P2RAMP-PACE-FM-111) is based upon an examination of data generated from the 43 fish samples that were collected on April 18, June 12 and 13, and August 28, 2017, as part of the Hudson River PCBs Site Phase 2 Remedial Action Monitoring Program (RAMP).

This QA review was performed on polychlorinated biphenyl (PCB) analytical data in Sample Delivery Groups (SDGs) 40148598, 40151542, 40151619, and 40157940. The PCB data were generated in accordance with standard operating procedures (SOPs) for homogenization and preparation of tissue samples (SOP S-GB-L-009-Rev.01), extraction by SW-846 Method 3541 and determination of percent lipids (SOP S-GB-O-068-Rev.01), and the analysis for PCB Aroclors using SW-846 Method 8082A (SOP S-GB-O-067-Rev.01) included as Attachments 1, 2, and 3, respectively, of the Hudson River Phase 2 Remedial Action Monitoring Program 2017 Corrective Action Memorandum No. 15 (February 2018) to the Hudson River PCBs Superfund Site Phase 2 Remedial Action Monitoring Quality Assurance Project Plan (Phase 2 RAM QAPP, May 2012). These 35 samples were collected on April 18, June 12 and 13, and August 28, 2017, as part of the Hudson River PCBs Site Phase 2 RAMP and were analyzed by Pace Analytical Services, LLC (Pace), in Green Bay, Wisconsin.

All samples included in SDGs 40148598, 40151542, 40151619, and 40157940 have been validated and are identified on Table 1 of this QA review. Table 1 presents the field sample number, laboratory sample number, SDG number, collection date, and parameter analyzed and reviewed for each sample. Environmental Standards, Inc. (Environmental Standards), based the validation on an evaluation of the deliverable provided by the laboratory for SDGs 40148598, 40151542, 40151619, and 40157940.

This critical QA review identifies data quality issues for specific samples and specific evaluation criteria. The data qualifications allow the data end-user to best understand the usability of the analysis results. Data not qualified in this report should be considered valid based on the QC criteria that have been reviewed. The data deliverables were examined for compliance with the procedural and documentation requirements as stipulated in the Phase 2 RAM QAPP.

Data were examined to determine the usability of the analytical results. The reported analytical results are presented on the validated data summary tables in Section 2, which have been generated from the General Electric Company (GE) Hudson River database. The "Lab MDL" (i.e., the method detection limit [MDL]), "Lab RL" (i.e., the reporting limit [RL]), "Lab Result Value," and "Lab Qualifier" fields presented on the validated data summary tables were derived directly from the laboratory-provided electronic data deliverable (EDD) that was used to populate the GE Hudson River database with the analytical results. Errors in the "Lab MDL," "Lab RL," and "Lab Result Value" noted during validation have been corrected and the corrections are reflected in the "Validated MDL," "Validated RL," and "Validated Result Value" fields, respectively, on the validated data summary tables. Verification qualifier codes were placed in the "Ver Qualifier" field during the electronic data verification (EDV) process and are also presented on the validated data summary tables. Validation qualifier codes have been placed in the "Val Qualifier" fields on the data tables to enable the data user to quickly assess the qualitative and/or quantitative reliability of a result based on the criteria evaluated during this QA review. In addition, the "Final Result Qualifier" field has been updated to reflect the validation qualifier codes that override the "Ver Qualifier." Finally, the "Val Notes" field has been populated with codes that indicate the reason for the final result qualifiers. Definitions of the laboratory qualifier codes and verification/validation/final result qualifier codes are presented on the data summary tables.

Section 3 of this report presents the Electronic Data Verification Reports associated with the validated samples. Section 4 of this report presents the Data Support Documentation for this QA review. Section 5 of this report presents copies of the Case Narratives and Chain-of-Custody (COC) Records. Section 6 of this report presents copies of Project Correspondence.



TABLE 1
SUMMARY OF SAMPLES REVIEWED

| General Electric<br>Sample Number                 | Laboratory<br>Sample Number | SDG      | Date Sample<br>Collected | Parameter<br>Examined |
|---|-----------------------------|----------|--------------------------|-----------------------|
| TZ1-170418-01-STB-05                              | 40148598001                 | 40148598 | 4/18/17                  | PCB                   |
| TZ1-170418-01-STB-04                              | 40148598002                 | 40148598 | 4/18/17                  | PCB                   |
| TZ1-170418-01-STB-03                              | 40148598003                 | 40148598 | 4/18/17                  | PCB                   |
| TZ1-170418-01-STB-02                              | 40148598004                 | 40148598 | 4/18/17                  | PCB                   |
| TZ1-170418-01-STB-01                              | 40148598005                 | 40148598 | 4/18/17                  | PCB                   |
| TZ1-170418-01-STB-01MS<br>(Matrix Spike)          | 1653812                     | 40148598 | 4/18/17                  | PCB                   |
| TZ1-170418-01-STB-01DUP<br>(Laboratory Duplicate) | 1653813                     | 40148598 | 4/18/17                  | PCB                   |
| TD4-170612-01-SMB-01                              | 40151542001                 | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-05                              | 40151542002                 | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-04                              | 40151542003                 | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-03                              | 40151542004                 | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-03MS<br>(Matrix Spike)          | 1652258                     | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-03DUP<br>(Laboratory Duplicate) | 1652259                     | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-02                              | 40151542005                 | 40151542 | 6/12/17                  | PCB                   |
| TD3-170612-01-SMB-01                              | 40151542006                 | 40151542 | 6/12/17                  | PCB                   |
| SW1-170613-01-YP-05                               | 40151619001                 | 40151619 | 6/13/17                  | PCB                   |
| SW1-170613-01-YP-04                               | 40151619002                 | 40151619 | 6/13/17                  | PCB                   |
| SW1-170613-01-YP-04MS<br>(Matrix Spike)           | 1662165                     | 40151619 | 6/13/17                  | PCB                   |
| SW1-170613-01-YP-04DUP<br>(Laboratory Duplicate)  | 1662166                     | 40151619 | 6/13/17                  | PCB                   |
| SW1-170613-01-YP-03                               | 40151619003                 | 40151619 | 6/13/17                  | PCB                   |
| SW1-170613-01-YP-02                               | 40151619004                 | 40151619 | 6/13/17                  | PCB                   |
| TD5-170828-01-PKSD-02                             | 40157940001                 | 40157940 | 8/28/17                  | PCB                   |
| TD3-170828-01-PKSD-05                             | 40157940002                 | 40157940 | 8/28/17                  | PCB                   |
| TD3-170828-01-PKSD-04                             | 40157940003                 | 40157940 | 8/28/17                  | PCB                   |
| TD3-170828-01-PKSD-03                             | 40157940004                 | 40157940 | 8/28/17                  | PCB                   |
| TD3-170828-01-PKSD-02                             | 40157940005                 | 40157940 | 8/28/17                  | PCB                   |

TABLE 1 (Cont.)

| General Electric<br>Sample Number                  | Laboratory<br>Sample Number | SDG      | Date Sample<br>Collected | Parameter<br>Examined |
|--|-----------------------------|----------|--------------------------|-----------------------|
| TD2-170828-01-PKSD-02                              | 40157940006                 | 40157940 | 8/28/17                  | PCB                   |
| TD2-170828-01-PKSD-01                              | 40157940007                 | 40157940 | 8/28/17                  | PCB                   |
| TD1-170828-01-PKSD-05                              | 40157940008                 | 40157940 | 8/28/17                  | PCB                   |
| TD1-170828-01-PKSD-04                              | 40157940009                 | 40157940 | 8/28/17                  | PCB                   |
| TD1-170828-01-PKSD-03                              | 40157940010                 | 40157940 | 8/28/17                  | PCB                   |
| TD1-170828-01-PKSD-02                              | 40157940011                 | 40157940 | 8/28/17                  | PCB                   |
| ND2-170828-01-PKSD-04                              | 40157940012                 | 40157940 | 8/28/17                  | PCB                   |
| ND2-170828-01-PKSD-03                              | 40157940013                 | 40157940 | 8/28/17                  | PCB                   |
| ND2-170828-01-PKSD-02                              | 40157940014                 | 40157940 | 8/28/17                  | PCB                   |
| ND2-170828-01-GOSH-02                              | 40157940015                 | 40157940 | 8/28/17                  | PCB                   |
| ND2-170828-01-GOSH-02MS<br>(Matrix Spike)          | 1681430                     | 40157940 | 8/28/17                  | РСВ                   |
| ND2-170828-01-GOSH-02DUP<br>(Laboratory Duplicate) | 1681911                     | 40157940 | 8/28/17                  | PCB                   |
| ND1-170828-01-PKSD-06                              | 40157940016                 | 40157940 | 8/28/17                  | PCB                   |
| ND1-170828-01-PKSD-05                              | 40157940017                 | 40157940 | 8/28/17                  | PCB                   |
| ND1-170828-01-PKSD-03                              | 40157940018                 | 40157940 | 8/28/17                  | PCB                   |
| ND1-170828-01-PKSD-02                              | 40157940019                 | 40157940 | 8/28/17                  | PCB                   |
| ND1-170828-01-PKSD-01                              | 40157940020                 | 40157940 | 8/28/17                  | PCB                   |

# NOTE:

PCB - Homogenization and preparation of tissue samples (SOP S-GB-L-009-Rev.01), extraction by SW-846 Method 3541 and determination of percent lipids (SOP S-GB-O-068-Rev.01), and the analysis for PCB Aroclors using SW-846 Method 8082A (SOP S-GB-O-067-Rev.01). (43 analyses)

# Section 1 Quality Assurance Review

The organic analyses of 43 fish samples (including quality control [QC] samples) collected on April 18, June 12 and 13, and August 28, 2017, as part of the Hudson River PCBs Site Phase 2 RAMP, were performed by Pace in Green Bay, Wisconsin.

The samples included in this QA review were included in SDGs 40148598, 40151542, 40151619, and 40157940. All samples were analyzed by the SOPs for homogenization and preparation of tissue samples (SOP S-GB-L-009-Rev.01), extraction by SW-846 Method 3541 and determination of percent lipids (SOP S-GB-O-068-Rev.01), and the analysis for PCB Aroclors using SW-846 Method 8082A (SOP S-GB-O-067-Rev.01) included as Attachments 1, 2, and 3, respectively, of the CAM 15 (February 2018) to the Phase 2 RAM QAPP. The samples reviewed are identified on Table 1.

Section 3 of this QA review presents the EDV reports for the SDGs included in this QA review. An EDV report is the output of the data verification module of the database program and utilizes the information reported in the laboratory EDDs and the field database. The specific measures evaluated during verification and the associated criteria are addressed in the Phase 2 RAM QAPP (Section 12.2) and include the measures specified below:

- Holding times
- Accuracy (by evaluating laboratory control sample [LCS] and matrix spike [MS] recoveries)
- Precision (by evaluating laboratory duplicate results)
- Blank contamination (laboratory method blanks)
- Surrogate compound recoveries

The EDV reports in Section 3 include the measures specified above that required qualification. Verification measures for which qualification was not required using EDV are not presented in the EDV reports in Section 3. Qualification of data based on validation supercedes qualification based on EDV when there is a discrepancy between the two methods of qualification.

The data validation has been performed in accordance with the Data Validation SOP for Aroclor PCB Data (DVAROCLOR; Appendix 10.5-6 of the Phase 2 RAM QAPP). The findings offered in this QA review are based upon an evaluation of the complete data package for the following items:

- Sample holding times
- Initial calibration results
- Method blank analysis results
- LCS results
- Laboratory duplicate sample precision
- Qualitative identification

- Sample condition upon laboratory receipt
- Continuing calibration verification results
- MS recoveries
- Surrogate recoveries
- Appropriate quantitation of results

The data reviewer has edited the laboratory-reported data and QC summary forms based on findings cited in this QA review. Furthermore, the data reviewer has included copies of all relevant raw data, QC forms, and other documentation needed to support these edits in the Data Support Documentation (Section 4) of this QA review.

# A. Deliverable Review

- 1. As historically reported, on the PCB Analysis Data Sheets (Form 1's), the reported concentrations of Aroclors 1221, 1248, 1254, and/or 1260 were reported to provide a more accurate quantitation of an altered Aroclor pattern. The patterns for these specific Aroclors were not actually observed in the samples. Many of the quantitation peaks for each of the target Aroclors are present in the majority of sample chromatograms such that each target Aroclor often quantitates to a concentration above the MDL. The Aroclors to be quantitated in each sample were selected by laboratory personnel to best match the total PCBs result that historically would have been obtained using the Pace Schenectady modified Green Bay Method (based on PCB patterns similar to samples that were analyzed by both SW-846 Method 8082A and the modified Green Bay Method). The data users use only the total PCBs results obtained from the SW-846 Method 8082A analysis and do not use the individual Aroclor results. There is no impact on data usability for this project due to this issue.
- 2. As stated in Deliverable Review issue #1, the majority of quantitation peaks for many target Aroclors are present in the sample chromatograms. Aroclors 1221, 1248, 1254, and/or 1260 were reported in the unspiked parent samples in SDGs 40148598, 40151542, 40151619, and 40157940 as the best Aroclor matches; however, Aroclor 1242 was spiked in the associated MS samples. Many of the quantitation peaks for each of the target Aroclors were present in the unspiked parent sample chromatograms such that Aroclor 1242 quantitated to a concentration above the MDL in the unspiked samples although it was not reported as a positive result due to the fact that there were better matches for other Aroclors. The laboratory information management system (LIMS) used at the prior project laboratory was able to subtract parent sample background (Aroclor 1242) by a manual process to calculate the MS recovery even when Aroclor 1242 was not reported in the parent sample. Although this was an atypical laboratory practice, it resulted in more accurate MS recovery quantitation as it accounted for PCB background that otherwise elevated the MS recovery. Due to limitations in the software used to report PCB Aroclor data at Pace Green Bay, parent sample background of a non-reported Aroclor cannot be subtracted from MS results in order to calculate MS recovery. The data reviewer manually re-calculated the background results for Aroclor 1242 in all parent samples, and manually re-calculated the MS recoveries after subtracting the background results from the MS results. The spreadsheets used by the data reviewer are included in Section 4 of the report for each re-calculated MS recovery. The EDV process was based on the original MS recoveries; however, the data reviewer re-evaluated the MSs based on the re-calculated recoveries.
- 3. The EDV process did not include an evaluation of the "Calibration Compliant" field as required by the Phase 2 RAM QAPP (Section 12.2.1). A separate query was performed on the database to identify any instances when the calibration associated with a result was reported to be non-compliant. The query did not identify any instances of non-compliant

- calibrations for the data included in this report. The calibration was also confirmed to be compliant during validation of the data.
- 4. For several samples in all SDGs, the total PCBs result was not flagged "J" during the EDV process. These results should be considered estimated and have been flagged "J" on the data tables, as they are summations including estimated results for various Aroclors.
- The laboratory noted in the Case Narrative and Sample Receipt of SDG 40151619 that ice
  melt water was present in all sample bags. The data reviewer determined qualification of
  the data was not warranted based on this finding.
- 6. There was a discrepancy for the time received for all SDG 40151619 samples. The laboratory listed a time of 1521 throughout the data package, while the COC indicated 0950 for the time received. The data reviewer hand corrected the laboratory data included in Section 4C to reflect the recorded time on the COC.
- 7. Environmental Standards worked with Pace personnel to resolve several deliverable issues that are summarized in the Project Correspondence of this report. This QA review is based on the revised data packages provided by Pace to incorporate the resolution to the issues included in Section 4C.

# B. Procedural Review

- 1. The Phase 2 RAM QAPP surrogate recovery limits of 60% 140% (CAM 15, Attachment 3, SOP S-GB-O-067-Rev.00, Section 13.1) do not apply to samples analyzed at greater than 5-fold dilutions. Based on discussions with Pace Green Bay, the laboratory evaluates surrogate recoveries up to a 10-fold dilution (refer to Project Correspondence). For the majority of samples in SDG 40157940, the sample-specific method performance based on surrogate recoveries could not be evaluated due to the dilutions (> 10 fold) required for analysis because of the PCB levels present in the samples (SOP DVAROCLOR, Surrogate Note 5).
- 2. The Phase 2 RAM QAPP COC requirements described in Section 10.1 were not met for the following SDGs. The COC Record for SDG 40151619 did not include the Sampler name. The COC Record for SDG 40151542 did not include the Sampler name, relinquish date, or relinquish time; however, the Sample Receipt indicated that only one of three coolers were received during shipment, so it is possible that a completed COC was included, but could not be verified by the data reviewer.

## C. Data Usability Evaluation

With respect to data usability, the principal areas of concern are quantitation below the RLs and the reporting convention for total PCBs (*i.e.*, summing the estimated individual Aroclor results). Based on a rigorous review of the data provided, the following data qualifiers are offered. The following data usability issues represent an interpretation of the QC results obtained for the project samples. Quite often, data qualifications address issues relating to sample matrix problems. Similarly, the Phase 2 RAM QAPP data validation SOP specifies areas of the data that require qualification, yet the analytical SOPs used for analysis may not require corrective action. Accordingly, the following data usability issues should <u>not</u> be construed as an indication of laboratory performance.

# Organic Data Qualifiers

- According to project-specific reporting requirements, all results reported at concentrations between the sample-specific MDLs and RLs (adjusted for dilution factors and sample weight) should be considered estimated and have been flagged "J" on the data tables. (Val Note = J-RL)
- The reported positive results for total PCBs summed from estimated individual Aroclor concentrations should be considered estimated and have been flagged "J" on the data tables. (Val Note = J-TOT)

# D. Summary

This QA review identified aspects of the data that required qualification. Overall, the analytical data are acceptable for use as reported by the laboratory, with the following qualifications. Several results were qualified due to quantitation below the RLs and the reporting convention for total PCBs (*i.e.*, summing the estimated individual Aroclor results). In order to use any of the data, the data user should understand the qualifications and limitations as specified in this QA review.

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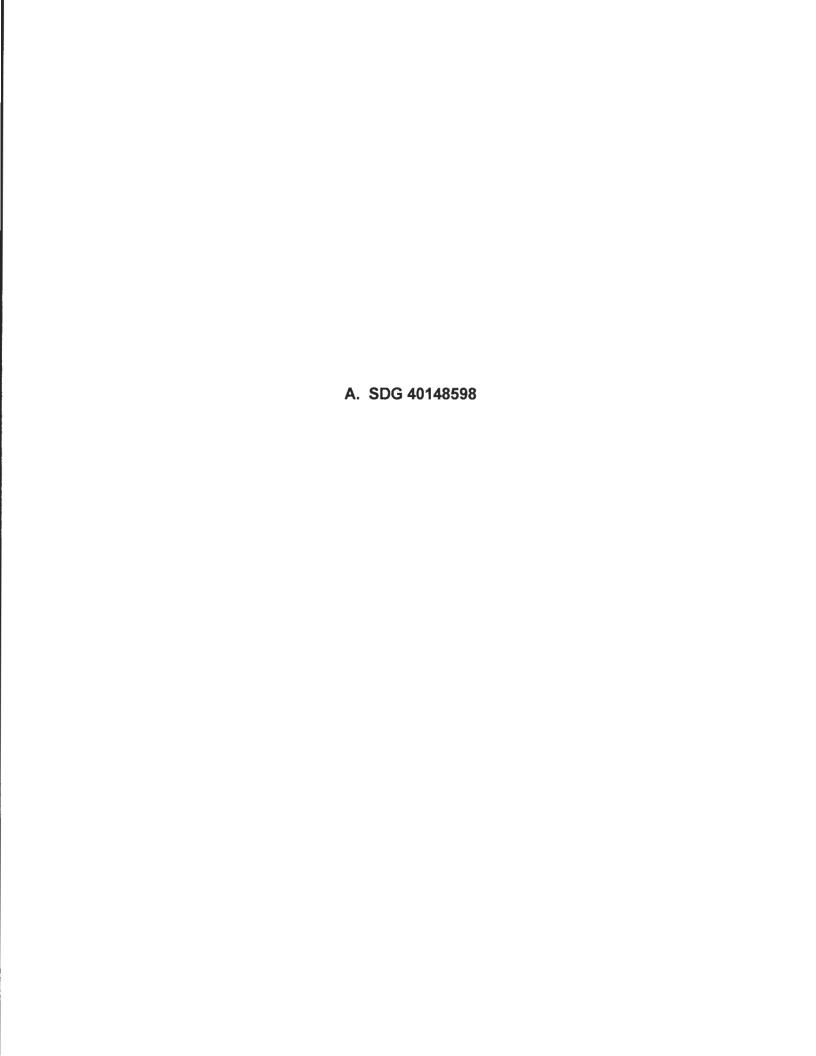
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# **SECTION 2**

**ANALYTICAL RESULTS** 



| Sample Delivery Grou | 40148598             |
|----------------------|----------------------|
| Sys Sample Code      | COC170418-T11-01-001 |
| Sample Name          | TZ1-170418-01-STB-05 |
| Sample Date          | 04/18/17 05:48 PM    |
| Lab Sample Id T      | 40148598001          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 1                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |
|                      |                      |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | Ü                 | U                             | N    | 11        |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 49.8   | U                 | V-7-2             |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 49.8   | U                 | ,,,,,             |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 70.1                   | 11.4    | 49.8   |                   |                   | 70.1                         | 11.4             | 49.8            |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 75.1                   | 11.4    | 49.8   |                   |                   | 75.1                         | 11.4             | 49.8            |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 75.4                   | 11.4    | 49.8   |                   |                   | 75.4                         | 11.4             | 49.8            |                   |                               | Y    |           |
| Total PCBs       | 1336-36-3  | 221                    | 11.4    | 49.8   |                   |                   | 221                          | 11.4             | 49.8            |                   |                               | Υ    |           |

## Laboratory Qualifier Definitions:

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170418-T11-01-002 |
| Sample Name          | TZ1-170418-01-STB-04 |
| Sample Date          | 04/18/17 05:44 PM    |
| Lab Sample ld T      | 40148598002          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 1                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |
|                      |                      |

| Chemical<br>Name | Cas Rn              | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|---------------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2          |                        | 11.4    | 50     | U                 |                   |                              | 11.4             | 50              | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2          |                        | 11.4    | 50     | U                 |                   |                              | 11.4             | 50              | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5          |                        | 11.4    | 50     | U                 |                   |                              | 11.4             | 50              | U                 | Ū                             | N              |           |
| Aroclor 1242     | 53469-21-9          |                        | 11.4    | 50     | U                 |                   |                              | 11.4             | 50              | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6          | 19                     | 11.4    | 50     | J                 |                   | 19                           | 11.4             | 50              | J                 | J                             | Y              | J-RL      |
| Aroclor 1254     | 1109 <b>7</b> -69-1 | 28.9                   | 11.4    | 50     | J                 |                   | 28.9                         | 11.4             | 50              | J                 | J                             | Y              | J-RL      |
| Aroclor 1260     | 11096-82-5          | 28.8                   | 11.4    | 50     | J                 |                   | 28.8                         | 11.4             | 50              | J                 | J                             | Υ              | J-RL      |
| Total PCBs       | 1336-36-3           | 76.7                   | 11.4    | 50     |                   |                   | 76.7                         | 11.4             | 50              | J                 | J                             | Y              | J-TOT     |

## Laboratory Qualifier Definitions:

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| COC170418-T11-01-003 |
|----------------------|
| TZ1-170418-01-STB-03 |
| 04/18/17 05:42 PM    |
| 40148598003          |
| ENV                  |
| F                    |
| SW846 8082A          |
| 1                    |
| Validated            |
| N                    |
| ug/kg                |
|                      |

|                  |            | 1 3 3                  |         |        |                   |                   |                              |                  |                 |                   |                               |      |           |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 67.9                   | 11.4    | 49.8   |                   |                   | 67.9                         | 11.4             | 49.8            |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 86                     | 11.4    | 49.8   | -                 |                   | 86                           | 11.4             | 49.8            |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 104                    | 11.4    | 49.8   |                   |                   | 104                          | 11.4             | 49.8            |                   |                               | Y    |           |
| Total PCBs       | 1336-36-3  | 258                    | 11.4    | 49.8   |                   |                   | 258                          | 11.4             | 49.8            |                   |                               | Υ    |           |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170418-T11-01-004 |
| Sample Name          | TZ1-170418-01-STB-02 |
| Sample Date          | 04/18/17 05:40 PM    |
| Lab Sample Id T      | 40148598004          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Ani Method Name  | SW846 8082A          |
| Dilution Factor      | 1                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |
|                      |                      |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 49.8   | U                 |                   |                              | 11.4             | 49.8            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 73                     | 11.4    | 49.8   |                   |                   | 73                           | 11.4             | 49.8            |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 94.6                   | 11.4    | 49.8   |                   |                   | 94.6                         | 11.4             | 49.8            |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 96.2                   | 11.4    | 49.8   |                   |                   | 96.2                         | 11.4             | 49.8            |                   |                               | Y    |           |
| Total PCBs       | 1336-36-3  | 264                    | 11.4    | 49.8   |                   |                   | 264                          | 11.4             | 49.8            |                   |                               | Υ    |           |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

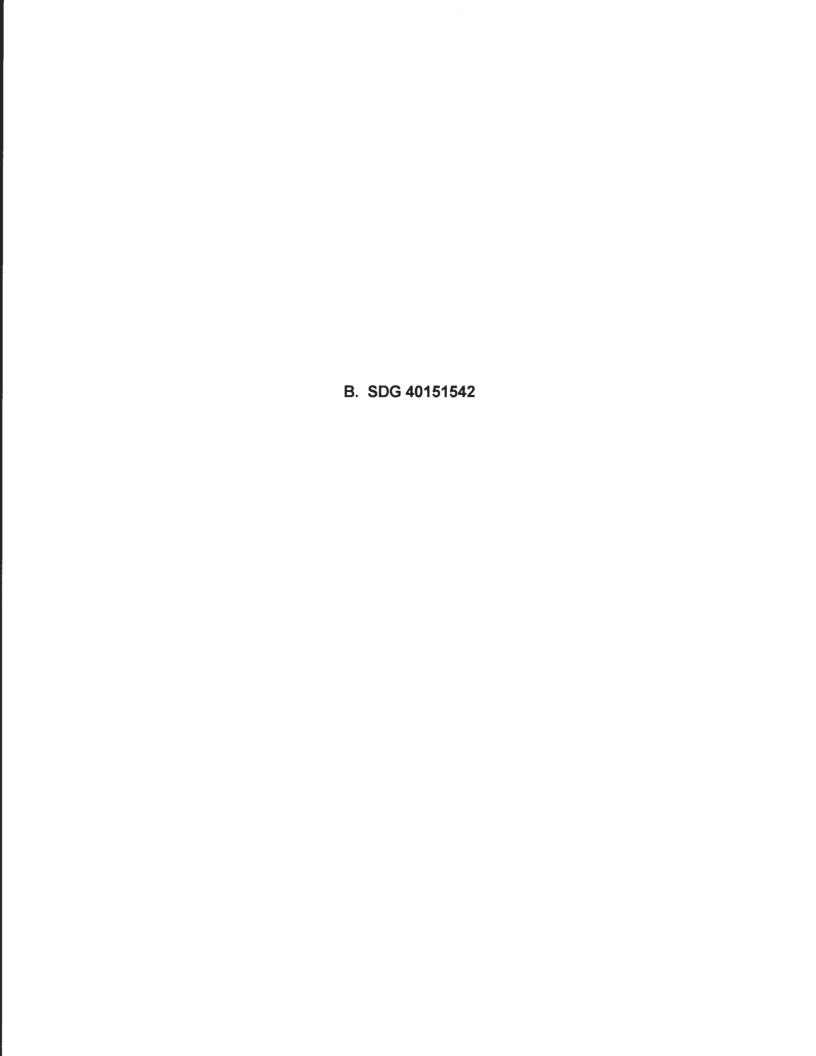
| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170418-T11-01-005 |
| Sample Name          | TZ1-170418-01-STB-01 |
| Sample Date          | 04/18/17 05:35 PM    |
| Lab Sample Id T      | 40148598005          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 2                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |
|                      |                      |

|                  |            | 1-99                   |         |        |                   | 2.2.2.2.2         |                              |                  |                 |                   |                               |      |           |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2 |                        | 22.8    | 99.8   | U                 |                   |                              | 22.8             | 99.8            | U                 | U                             | N    | :         |
| Aroclor 1221     | 11104-28-2 |                        | 22.8    | 99.8   | U                 | 1                 |                              | 22.8             | 99.8            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 22.8    | 99.8   | U                 |                   |                              | 22.8             | 99.8            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 22.8    | 99.8   | U                 |                   |                              | 22.8             | 99.8            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 229                    | 22.8    | 99.8   |                   |                   | 229                          | 22.8             | 99.8            |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 253                    | 22.8    | 99.8   |                   |                   | 253                          | 22.8             | 99.8            |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 274                    | 22.8    | 99.8   |                   |                   | 274                          | 22.8             | 99.8            |                   |                               | Y    |           |
| Total PCBs       | 1336-36-3  | 756                    | 22.8    | 99.8   |                   |                   | 756                          | 22.8             | 99.8            |                   |                               | Υ    |           |

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- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.



| Sample Delivery Group | 40151542             |
|-----------------------|----------------------|
| Sys Sample Code       | COC170612-T11-01-014 |
| Sample Name           | TD4-170612-01-SMB-01 |
| Sample Date           | 06/12/17 04:16 PM    |
| Lab Sample ld T       | 40151542001          |
| Sample Type Code      | ENV                  |
| Sample Matrix Code    | F                    |
| Lab Anl Method Name   | SW846 8082A          |
| Dilution Factor       | 1                    |
| Qc Level              | Validated            |
| Total Or Dissolved    | N                    |
| Result Unit           | ug/kg                |
|                       |                      |

|                  |            | 3 3                    |         |        |                   |                   |                              |                  |                 |                   |                               |      |           |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 50.2   | U                 |                   |                              | 11.4             | 50.2            | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 50.2   | U                 |                   |                              | 11.4             | 50.2            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 50.2   | U                 |                   |                              | 11.4             | 50.2            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 50.2   | U                 |                   |                              | 11.4             | 50.2            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 150                    | 11.4    | 50.2   |                   |                   | 150                          | 11.4             | 50.2            |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 116                    | 11.4    | 50.2   |                   |                   | 116                          | 11.4             | 50.2            |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 | 46.9                   | 11.4    | 50.2   | J                 |                   | 46.9                         | 11.4             | 50.2            | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 313                    | 11.4    | 50.2   |                   |                   | 313                          | 11.4             | 50.2            | J                 | J                             | Y    | J-TOT     |

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
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| Sample Delivery Group |                      |
|-----------------------|----------------------|
| Sys Sample Code       | COC170612-T11-01-015 |
| Sample Name           | TD3-170612-01-SMB-05 |
| Sample Date           | 06/12/17 04:09 PM    |
| Lab Sample Id T       | 40151542002          |
| Sample Type Code      | ENV                  |
| Sample Matrix Code    | F                    |
| Lab Anl Method Name   | SW846 8082A          |
| Dilution Factor       | 10                   |
| Qc Level              | Validated            |
| Total Or Dissolved    | N                    |
| Result Unit           | ug/kg                |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |  |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|--|
| Aroclor 1016     | 12674-11-2 |                        | 114     | 501    | U                 |                   |                              | 114              | 501             | U                 | U                             | N    |           |  |
| Aroclor 1221     | 11104-28-2 |                        | 114     | 501    | U                 |                   |                              | 114              | 501             | U                 | U                             | N    |           |  |
| Aroclor 1232     | 11141-16-5 |                        | 114     | 501    | U                 |                   |                              | 114              | 501             | U                 | U                             | N    |           |  |
| Aroclor 1242     | 53469-21-9 |                        | 114     | 501    | U                 |                   |                              | 114              | 501             | U                 | U                             | N    |           |  |
| Aroclor 1248     | 12672-29-6 | 1,900                  | 114     | 501    |                   |                   | 1,900                        | 114              | 501             |                   |                               | Υ    |           |  |
| Aroclor 1254     | 11097-69-1 | 1,980                  | 114     | 501    |                   |                   | 1,980                        | 114              | 501             |                   |                               | Y    |           |  |
| Aroclor 1260     | 11096-82-5 | 392                    | 114     | 501    | J                 |                   | 392                          | 114              | 501             | J                 | J                             | Υ    | J-RL      |  |
| Total PCBs       | 1336-36-3  | 4,280                  | 114     | 501    |                   |                   | 4,280                        | 114              | 501             | J                 | J                             | Υ    | J-TOT     |  |

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| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170612-T11-01-016 |
| Sample Name          | TD3-170612-01-SMB-04 |
| Sample Date          | 06/12/17 04:07 PM    |
| Lab Sample Id T      | 40151542003          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 4                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N .                  |
| Result Unit          | ug/kg                |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes                               |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|---|
| Aroclor 1016     | 12674-11-2 |                        | 45.5    | 199    | U                 |                   |                              | 45.5             | 199             | U                 | U                             | N              | h                                       |
| Aroclor 1221     | 11104-28-2 |                        | 45.5    | 199    | U                 |                   |                              | 45.5             | 199             | U                 | U                             | N              |   |
| Aroclor 1232     | 11141-16-5 |                        | 45.5    | 199    | U                 |                   |                              | 45.5             | 199             | U                 | U                             | N              | VF 2                                    |
| Aroclor 1242     | 53469-21-9 |                        | 45.5    | 199    | U                 |                   |                              | 45.5             | 199             | U                 | U                             | N              |   |
| Aroclor 1248     | 12672-29-6 | 1,010                  | 45.5    | 199    |                   |                   | 1,010                        | 45.5             | 199             |                   |                               | Υ              | , |
| Aroclor 1254     | 11097-69-1 | 584                    | 45.5    | 199    |                   |                   | 584                          | 45.5             | 199             |                   |                               | Y              |   |
| Aroclor 1260     | 11096-82-5 | 103                    | 45.5    | 199    | J                 |                   | 103                          | 45.5             | 199             | J                 | J                             | Υ              | J-RL                                    |
| Total PCBs       | 1336-36-3  | 1,700                  | 45.5    | 199    |                   |                   | 1,700                        | 45.5             | 199             | J                 | J                             | Υ              | J-TOT                                   |

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| Sample Delivery Group |                      |
|-----------------------|----------------------|
| Sys Sample Code       | COC170612-T11-01-017 |
| Sample Name           | TD3-170612-01-SMB-03 |
| Sample Date           | 06/12/17 04:05 PM    |
| Lab Sample Id T       | 40151542004          |
| Sample Type Code      | ENV                  |
| Sample Matrix Code    | F                    |
| Lab Anl Method Name   | SW846 8082A          |
| Dilution Factor       | 10                   |
| Qc Level              | Validated            |
| Total Or Dissolved    | N                    |
| Result Unit           | ug/kg                |
|                       |                      |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 114     | 500    | U                 |                   |                              | 114              | 500             | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 114     | 500    | U                 |                   |                              | 114              | 500             | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 | :                      | 114     | 500    | U                 |                   |                              | 114              | 500             | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 114     | 500    | U                 |                   |                              | 114              | 500             | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 1,170                  | 114     | 500    |                   |                   | 1,170                        | 114              | 500             |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 1,690                  | 114     | 500    |                   |                   | 1,690                        | 114              | 500             |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 970                    | 114     | 500    |                   |                   | 970                          | 114              | 500             |                   |                               | Y    |           |
| Total PCBs       | 1336-36-3  | 3,830                  | 114     | 500    |                   |                   | 3,830                        | 114              | 500             |                   |                               | Y    |           |

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170612-T11-01-018 |
| Sample Name          | TD3-170612-01-SMB-02 |
| Sample Date          | 06/12/17 04:03 PM    |
| Lab Sample Id T      | 40151542005          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 5                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 57.2    | 251    | U                 |                   |                              | 57.2             | 251             | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 57.2    | 251    | U                 |                   |                              | 57.2             | 251             | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 57.2    | 251    | U                 |                   |                              | 57.2             | 251             | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 57.2    | 251    | U                 |                   |                              | 57.2             | 251             | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 1,060                  | 57.2    | 251    |                   |                   | 1,060                        | 57.2             | 251             |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 1,080                  | 57.2    | 251    |                   |                   | 1,080                        | 57.2             | 251             |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 | 200                    | 57.2    | 251    | J                 |                   | 200                          | 57.2             | 251             | J                 | J                             | Υ    | J-RL      |
| Total PCBs       | 1336-36-3  | 2,340                  | 57.2    | 251    |                   |                   | 2,340                        | 57.2             | 251             | J                 | J                             | Y    | J-TOT     |

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170612-T11-01-019 |
| Sample Name          | TD3-170612-01-SMB-01 |
| Sample Date          | 06/12/17 04:01 PM    |
| Lab Sample Id T      | 40151542006          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 3                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |
|                      |                      |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 34.2    | 150    | U                 | J                 |                              | 34.2             | 150             | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 34.2    | 150    | U                 |                   |                              | 34.2             | 150             | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 34.2    | 150    | U                 |                   |                              | 34.2             | 150             | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 34.2    | 150    | U                 |                   |                              | 34.2             | 150             | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 564                    | 34.2    | 150    |                   |                   | 564                          | 34.2             | 150             |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 357                    | 34.2    | 150    |                   |                   | 357                          | 34.2             | 150             |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 101                    | 34.2    | 150    | J                 |                   | 101                          | 34.2             | 150             | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 1,020                  | 34.2    | 150    |                   |                   | 1,020                        | 34.2             | 150             | J                 | J                             | Υ    | J-TOT     |

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- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.



| Sample Delivery Grou | 40151619             |
|----------------------|----------------------|
| Sys Sample Code      | COC170613-T11-06-001 |
| Sample Name          | SW1-170613-01-YP-05  |
| Sample Date          | 06/13/17 04:21 PM    |
| Lab Sample ld T      | 40151619001          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 1                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |
| T                    |                      |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 166                    | 11.4    | 50.1   |                   |                   | 166                          | 11.4             | 50.1            |                   |                               | Υ    |           |
| Aroclor 1254     | 11097-69-1 | 96.8                   | 11.4    | 50.1   |                   |                   | 96.8                         | 11.4             | 50.1            |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 | 23.3                   | 11.4    | 50.1   | J                 |                   | 23.3                         | 11.4             | 50.1            | J                 | J                             | Υ    | J-RL      |
| Total PCBs       | 1336-36-3  | 286                    | 11.4    | 50.1   |                   |                   | 286                          | 11.4             | 50.1            | J                 | J                             | Υ    | J-TOT     |

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
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- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170613-T11-06-002 |
| Sample Name          | SW1-170613-01-YP-04  |
| Sample Date          | 06/13/17 04:20 PM    |
| Lab Sample Id T      | 40151619002          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 1                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 49.9   | Ų                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 284                    | 11.4    | 49.9   |                   |                   | 284                          | 11.4             | 49.9            |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 183                    | 11.4    | 49.9   |                   |                   | 183                          | 11.4             | 49.9            |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 41.4                   | 11.4    | 49.9   | J                 |                   | 41.4                         | 11.4             | 49.9            | J                 | J                             | Υ    | J-RL      |
| Total PCBs       | 1336-36-3  | 508                    | 11.4    | 49.9   |                   |                   | 508                          | 11.4             | 49.9            | J                 | J                             | Υ    | J-TOT     |

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- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                      |
|----------------------|----------------------|
| Sys Sample Code      | COC170613-T11-06-003 |
| Sample Name          | SW1-170613-01-YP-03  |
| Sample Date          | 06/13/17 04:18 PM    |
| Lab Sample Id T      | 40151619003          |
| Sample Type Code     | ENV                  |
| Sample Matrix Code   | F                    |
| Lab Anl Method Name  | SW846 8082A          |
| Dilution Factor      | 1                    |
| Qc Level             | Validated            |
| Total Or Dissolved   | N                    |
| Result Unit          | ug/kg                |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 49.9   | U                 |                   |                              | 11.4             | 49.9            | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 325                    | 11.4    | 49.9   |                   |                   | 325                          | 11.4             | 49.9            |                   |                               | Υ              |           |
| Aroclor 1254     | 11097-69-1 | 215                    | 11.4    | 49.9   |                   |                   | 215                          | 11.4             | 49.9            |                   |                               | Υ              |           |
| Aroclor 1260     | 11096-82-5 | 56.2                   | 11.4    | 49.9   |                   |                   | 56.2                         | 11.4             | 49.9            |                   |                               | Υ              |           |
| Total PCBs       | 1336-36-3  | 596                    | 11.4    | 49.9   |                   |                   | 596                          | 11.4             | 49.9            |                   |                               | Υ              |           |

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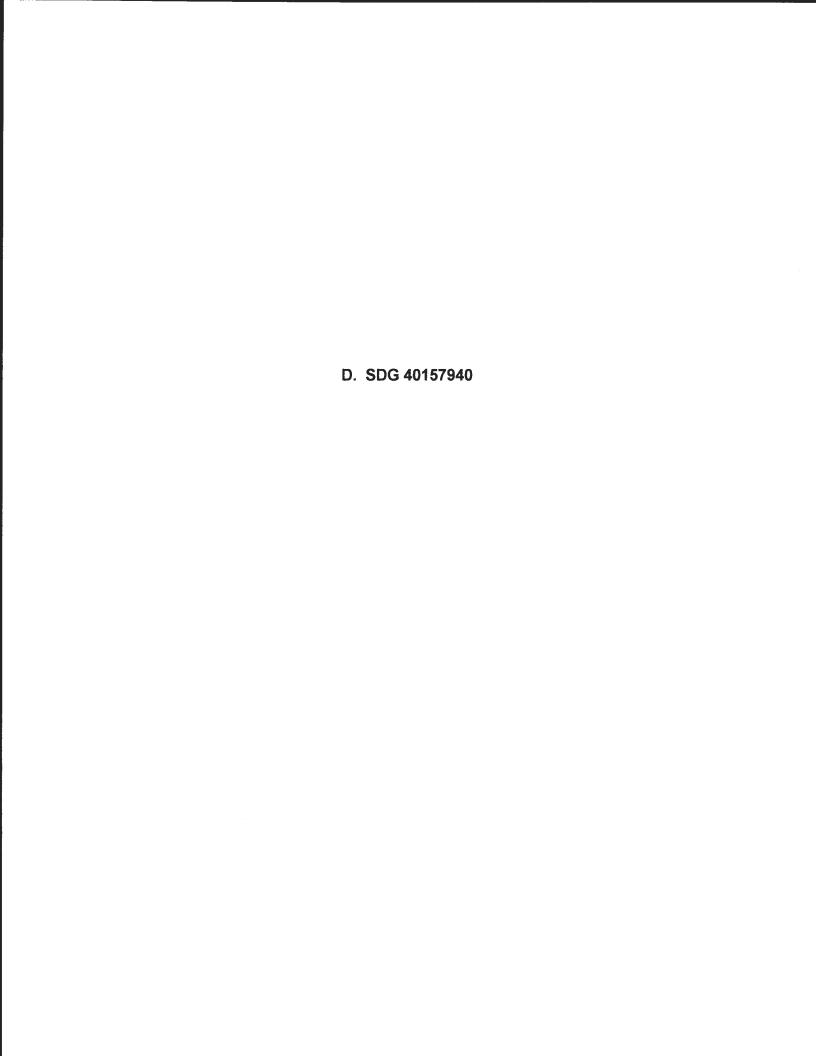
| Sample Delivery Group |                      |
|-----------------------|----------------------|
| Sys Sample Code       | COC170613-T11-06-004 |
| Sample Name           | SW1-170613-01-YP-02  |
| Sample Date           | 06/13/17 04:16 PM    |
| Lab Sample Id ⊤       | 40151619004          |
| Sample Type Code      | ENV                  |
| Sample Matrix Code    | F                    |
| Lab Anl Method Name   | SW846 8082A          |
| Dilution Factor       | 1                    |
| Qc Level              | Validated            |
| Total Or Dissolved    | N                    |
| Result Unit           | ug/kg                |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 11.4    | 50.1   | U                 |                   |                              | 11.4             | 50.1            | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 194                    | 11.4    | 50.1   |                   |                   | 194                          | 11.4             | 50.1            |                   |                               | Υ    |           |
| Aroclor 1254     | 11097-69-1 | 103                    | 11.4    | 50.1   |                   |                   | 103                          | 11.4             | 50.1            |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 | 34.2                   | 11.4    | 50.1   | J                 |                   | 34.2                         | 11.4             | 50.1            | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 332                    | 11.4    | 50.1   |                   |                   | 332                          | 11.4             | 50.1            | J                 | J                             | Y    | J-TOT     |

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- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.



| Sample Delivery Grou | 40157940              |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-001  |
| Sample Name          | TD5-170828-01-PKSD-02 |
| Sample Date          | 08/28/17 02:11 PM     |
| Lab Sample Id T      | 40157940001           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Ani Method Name  | SW846 8082A           |
| Dilution Factor      | 3                     |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes   |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-------------|
| Aroclor 1016     | 12674-11-2 |                        | 34.1    | 150    | U                 |                   | 0                            | 34.1             | 150             | U                 | U                             | N              |             |
| Aroclor 1221     | 11104-28-2 | 110                    | 34.1    | 150    | J                 |                   | 110                          | 34.1             | 150             | J                 | J                             | Y              | J-RL        |
| Aroclor 1232     | 11141-16-5 |                        | 34.1    | 150    | U                 |                   | <del>-</del>                 | 34.1             | 150             | U                 | U                             | N              | <del></del> |
| Aroclor 1242     | 53469-21-9 | :                      | 34.1    | 150    | U                 |                   |                              | 34.1             | 150             | U                 | U                             | N              |             |
| Aroclor 1248     | 12672-29-6 | 984                    | 34.1    | 150    |                   |                   | 984                          | 34.1             | 150             |                   |                               | Y              |             |
| Aroclor 1254     | 11097-69-1 | 571                    | 34.1    | 150    |                   |                   | 571                          | 34.1             | 150             |                   |                               | Y              |             |
| Aroclor 1260     | 11096-82-5 | 77.5                   | 34.1    | 150    | J                 |                   | 77.5                         | 34.1             | 150             | J                 | J                             | Y              | J-RL        |
| Total PCBs       | 1336-36-3  | 1,740                  | 34.1    | 150    |                   |                   | 1,740                        | 34.1             | 150             | J                 | J                             | Υ              | J-TOT       |

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- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-002  |
| Sample Name          | TD3-170828-01-PKSD-05 |
| Sample Date          | 08/28/17 03:10 PM     |
| Lab Sample Id T      | 40157940002           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 100                   |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
| Result Unit          | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 1,140   | 5,010  | U                 |                   |                              | 1,140            | 5,010           | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 |                        | 1,140   | 5,010  | U                 |                   |                              | 1,140            | 5,010           | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5 |                        | 1,140   | 5,010  | U                 |                   |                              | 1,140            | 5,010           | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 1,140   | 5,010  | U                 |                   |                              | 1,140            | 5,010           | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 20,400                 | 1,140   | 5,010  |                   |                   | 20,400                       | 1,140            | 5,010           |                   |                               | Υ              |           |
| Aroclor 1254     | 11097-69-1 | 10,400                 | 1,140   | 5,010  |                   |                   | 10,400                       | 1,140            | 5,010           |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 |                        | 1,140   | 5,010  | U                 |                   |                              | 1,140            | 5,010           | U                 | U                             | N              |           |
| Total PCBs       | 1336-36-3  | 30,800                 | 1,140   | 5,010  |                   |                   | 30,800                       | 1,140            | 5,010           |                   |                               | Υ              |           |

#### Laboratory Qualifier Definitions:

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-003  |
| Sample Name          | TD3-170828-01-PKSD-04 |
| Sample Date          | 08/28/17 03:09 PM     |
| Lab Sample Id T      | 40157940003           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 100                   |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |

|                  |            | 1 0 0                  |         |        |                   |                   |                              |                  |                 |                   |                               |      |           |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2 |                        | 1,140   | 4,990  | U                 |                   |                              | 1,140            | 4,990           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 1,140   | 4,990  | U                 |                   |                              | 1,140            | 4,990           | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 1,140   | 4,990  | U                 |                   |                              | 1,140            | 4,990           | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 1,140   | 4,990  | U                 |                   |                              | 1,140            | 4,990           | Ü                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 19,900                 | 1,140   | 4,990  | 4.44              |                   | 19,900                       | 1,140            | 4,990           |                   |                               | Υ    | V-12.     |
| Aroclor 1254     | 11097-69-1 | 10,700                 | 1,140   | 4,990  |                   |                   | 10,700                       | 1,140            | 4,990           |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 |                        | 1,140   | 4,990  | U                 |                   |                              | 1,140            | 4,990           | U                 | U                             | N    |           |
| Total PCBs       | 1336-36-3  | 30,600                 | 1,140   | 4,990  | 1                 |                   | 30,600                       | 1,140            | 4,990           |                   |                               | Υ    |           |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-004  |
| Sample Name          | TD3-170828-01-PKSD-03 |
| Sample Date          | 08/28/17 03:07 PM     |
| Lab Sample Id T      | 40157940004           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 50                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 709     | 3,110  | U                 |                   |                              | 709              | 3,110           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 709     | 3,110  | U                 |                   | ***                          | 709              | 3,110           | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 709     | 3,110  | U                 |                   |                              | 709              | 3,110           | U                 | U                             | N    | ·         |
| Aroclor 1242     | 53469-21-9 |                        | 709     | 3,110  | U                 |                   |                              | 709              | 3,110           | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 10,300                 | 709     | 3,110  |                   |                   | 10,300                       | 709              | 3,110           |                   |                               | Υ    |           |
| Aroclor 1254     | 11097-69-1 | 7,300                  | 709     | 3,110  |                   |                   | 7,300                        | 709              | 3,110           |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 | 814                    | 709     | 3,110  | J                 |                   | 814                          | 709              | 3,110           | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 18,400                 | 709     | 3,110  |                   |                   | 18,400                       | 709              | 3,110           | J                 | J                             | Υ    | J-TOT     |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
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- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Group |                       |
|-----------------------|-----------------------|
| Sys Sample Code       | COC170828-T11-02-005  |
| Sample Name           | TD3-170828-01-PKSD-02 |
| Sample Date           | 08/28/17 03:05 PM     |
| Lab Sample ld T       | 40157940005           |
| Sample Type Code      | ENV                   |
| Sample Matrix Code    | F                     |
| Lab Anl Method Name   | SW846 8082A           |
| Dilution Factor       | 200                   |
| Qc Level              | Validated             |
| Total Or Dissolved    | N                     |
| Result Unit           | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 2,280   | 10,000 | U                 |                   |                              | 2,280            | 10,000          | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 |                        | 2,280   | 10,000 | U                 |                   |                              | 2,280            | 10,000          | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5 |                        | 2,280   | 10,000 | U                 |                   |                              | 2,280            | 10,000          | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 2,280   | 10,000 | U                 |                   |                              | 2,280            | 10,000          | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 66,500                 | 2,280   | 10,000 |                   |                   | 66,500                       | 2,280            | 10,000          |                   |                               | Y              |           |
| Aroclor 1254     | 11097-69-1 | 26,700                 | 2,280   | 10,000 |                   |                   | 26,700                       | 2,280            | 10,000          |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 |                        | 2,280   | 10,000 | U                 |                   |                              | 2,280            | 10,000          | U                 | U                             | N              |           |
| Total PCBs       | 1336-36-3  | 93,200                 | 2,280   | 10,000 |                   |                   | 93,200                       | 2,280            | 10,000          |                   |                               | Υ              |           |

## Laboratory Qualifier Definitions:

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Group |                       |
|-----------------------|-----------------------|
| Sys Sample Code       | COC170828-T11-02-006  |
| Sample Name           | TD2-170828-01-PKSD-02 |
| Sample Date           | 08/28/17 12:19 PM     |
| Lab Sample Id T       | 40157940006           |
| Sample Type Code      | ENV                   |
| Sample Matrix Code    | F                     |
| Lab Anl Method Name   | SW846 8082A           |
| Dilution Factor       | 3                     |
| Qc Level              | Validated             |
| Total Or Dissolved    | N N                   |
| Result Unit           | ug/kg                 |

|                  |            | 100                    |         |        |                   |                   |                              |                  |                 |                   |                               |      |           |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2 |                        | 34.3    | 151    | U                 |                   |                              | 34.3             | 151             | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 34.3    | 151    | U                 |                   |                              | 34.3             | 151             | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 34.3    | 151    | U                 |                   |                              | 34.3             | 151             | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 34.3    | 151    | U                 |                   |                              | 34.3             | 151             | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 740                    | 34.3    | 151    |                   |                   | 740                          | 34.3             | 151             |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 395                    | 34.3    | 151    |                   |                   | 395                          | 34.3             | 151             |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 49.3                   | 34.3    | 151    | J                 |                   | 49.3                         | 34.3             | 151             | J                 | J                             | Υ    | J-RL      |
| Total PCBs       | 1336-36-3  | 1,180                  | 34.3    | 151    |                   |                   | 1,180                        | 34.3             | 151             | J                 | J                             | Υ    | J-TOT     |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
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- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-007  |
| Sample Name          | TD2-170828-01-PKSD-01 |
| Sample Date          | 08/28/17 12:15 PM     |
| Lab Sample ld T      | 40157940007           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Ani Method Name  | SW846 8082A           |
| Dilution Factor      | 2                     |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 23.5    | 103    | U                 |                   |                              | 23.5             | 103             | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 | 55.2                   | 23.5    | 103    | J                 |                   | 55.2                         | 23.5             | 103             | J                 | J                             | Y    | J-RL      |
| Aroclor 1232     | 11141-16-5 |                        | 23.5    | 103    | U                 |                   |                              | 23.5             | 103             | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 23.5    | 103    | U                 |                   |                              | 23.5             | 103             | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 490                    | 23.5    | 103    |                   |                   | 490                          | 23.5             | 103             |                   |                               | Υ    |           |
| Aroclor 1254     | 11097-69-1 | 282                    | 23.5    | 103    |                   |                   | 282                          | 23.5             | 103             |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 41.5                   | 23.5    | 103    | J                 |                   | 41.5                         | 23.5             | 103             | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 868                    | 23.5    | 103    |                   |                   | 868                          | 23.5             | 103             | J                 | J                             | Y    | J-TOT     |

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- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-008  |
| Sample Name          | TD1-170828-01-PKSD-05 |
| Sample Date          | 08/28/17 12:00 PM     |
| Lab Sample ld T      | 40157940008           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 20                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 316     | 1,390  | U                 |                   |                              | 316              | 1,390           | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 |                        | 316     | 1,390  | U                 |                   |                              | 316              | 1,390           | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5 |                        | 316     | 1,390  | U                 |                   |                              | 316              | 1,390           | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 316     | 1,390  | U                 |                   |                              | 316              | 1,390           | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 6,660                  | 316     | 1,390  |                   |                   | 6,660                        | 316              | 1,390           |                   |                               | Υ              |           |
| Aroclor 1254     | 11097-69-1 | 5,530                  | 316     | 1,390  |                   | *                 | 5,530                        | 316              | 1,390           |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 | 657                    | 316     | 1,390  | J                 |                   | 657                          | 316              | 1,390           | J                 | J                             | Υ              | J-RL      |
| Total PCBs       | 1336-36-3  | 12,800                 | 316     | 1,390  |                   |                   | 12,800                       | 316              | 1,390           | J                 | J                             | Υ              | J-TOT     |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-009  |
| Sample Name          | TD1-170828-01-PKSD-04 |
| Sample Date          | 08/28/17 11:58 AM     |
| Lab Sample Id T      | 40157940009           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 15                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

|                  |            | 1 - 0                  |         |        |                   |                   |                              |                  |                 |                   |                               |      |           |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2 |                        | 237     | 1,040  | U                 |                   |                              | 237              | 1,040           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 237     | 1,040  | Ų                 |                   |                              | 237              | 1,040           | U                 | Ų                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 237     | 1,040  | Ų                 |                   |                              | 237              | 1,040           | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 237     | 1,040  | Ų                 |                   |                              | 237              | 1,040           | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 4,080                  | 237     | 1,040  |                   |                   | 4,080                        | 237              | 1,040           |                   |                               | Υ    |           |
| Aroclor 1254     | 11097-69-1 | 2,880                  | 237     | 1,040  |                   |                   | 2,880                        | 237              | 1,040           |                   |                               | Υ    |           |
| Aroclor 1260     | 11096-82-5 | 331                    | 237     | 1,040  | J                 |                   | 331                          | 237              | 1,040           | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 7,290                  | 237     | 1,040  |                   |                   | 7,290                        | 237              | 1,040           | J                 | J                             | Υ    | J-TOT     |

## Laboratory Qualifier Definitions:

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-010  |
| Sample Name          | TD1-170828-01-PKSD-03 |
| Sample Date          | 08/28/17 11:56 AM     |
| Lab Sample Id T      | 40157940010           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 10                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 114     | 502    | U                 |                   |                              | 114              | 502             | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 |                        | 114     | 502    | U                 |                   |                              | 114              | 502             | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5 |                        | 114     | 502    | U                 |                   |                              | 114              | 502             | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 114     | 502    | U                 |                   |                              | 114              | 502             | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 2,120                  | 114     | 502    |                   |                   | 2,120                        | 114              | 502             |                   |                               | Y              |           |
| Aroclor 1254     | 11097-69-1 | 1,760                  | 114     | 502    |                   |                   | 1,760                        | 114              | 502             |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 | 204                    | 114     | 502    | J                 |                   | 204                          | 114              | 502             | J                 | J                             | Y              | J-RL      |
| Total PCBs       | 1336-36-3  | 4,080                  | 114     | 502    |                   |                   | 4,080                        | 114              | 502             | J                 | J                             | Y              | J-TOT     |

## Laboratory Qualifier Definitions:

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
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- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Group |                       |
|-----------------------|-----------------------|
| Sys Sample Code       | COC170828-T11-02-011  |
| Sample Name           | TD1-170828-01-PKSD-02 |
| Sample Date           | 08/28/17 11:53 AM     |
| Lab Sample Id T       | 40157940011           |
| Sample Type Code      | ENV                   |
| Sample Matrix Code    | F                     |
| Lab Ani Method Name   | SW846 8082A           |
| Dilution Factor       | 10                    |
| Qc Level              | Validated             |
| Total Or Dissolved    | N                     |
| Result Unit           | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 205     | 901    | U                 |                   |                              | 205              | 901             | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 205     | 901    | U                 |                   |                              | 205              | 901             | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 205     | 901    | U                 |                   |                              | 205              | 901             | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 205     | 901    | U                 |                   |                              | 205              | 901             | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 3,850                  | 205     | 901    |                   |                   | 3,850                        | 205              | 901             |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 2,510                  | 205     | 901    |                   |                   | 2,510                        | 205              | 901             |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 279                    | 205     | 901    | J                 |                   | 279                          | 205              | 901             | J                 | J                             | Υ    | J-RL      |
| Total PCBs       | 1336-36-3  | 6,640                  | 205     | 901    |                   |                   | 6,640                        | 205              | 901             | J                 | J                             | Y    | J-TOT     |

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- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-012  |
| Sample Name          | ND2-170828-01-PKSD-04 |
| Sample Date          | 08/28/17 05:51 PM     |
| Lab Sample Id T      | 40157940012           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 30                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes                               |  |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|---|--|
| Aroclor 1016     | 12674-11-2 |                        | 343     | 1,500  | U                 |                   |                              | 343              | 1,500           | U                 | U                             | N    |   |  |
| Aroclor 1221     | 11104-28-2 | 1,600                  | 343     | 1,500  |                   |                   | 1,600                        | 343              | 1,500           |                   |                               | Y    |   |  |
| Aroclor 1232     | 11141-16-5 |                        | 343     | 1,500  | U                 |                   |                              | 343              | 1,500           | U                 | U                             | N    | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |
| Aroclor 1242     | 53469-21-9 |                        | 343     | 1,500  | U                 |                   |                              | 343              | 1,500           | U                 | U                             | N    |   |  |
| Aroclor 1248     | 12672-29-6 | 4,750                  | 343     | 1,500  | 7000              |                   | 4,750                        | 343              | 1,500           |                   |                               | Y    |   |  |
| Aroclor 1254     | 11097-69-1 | 2,340                  | 343     | 1,500  |                   |                   | 2,340                        | 343              | 1,500           |                   |                               | Y    |   |  |
| Aroclor 1260     | 11096-82-5 | 454                    | 343     | 1,500  | J                 |                   | 454                          | 343              | 1,500           | J                 | J                             | Y    | J-RL                                    |  |
| Total PCBs       | 1336-36-3  | 9,150                  | 343     | 1,500  |                   |                   | 9,150                        | 343              | 1,500           | J                 | J                             | Υ    | J-TOT                                   |  |

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- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Group |                       |
|-----------------------|-----------------------|
| Sys Sample Code       | COC170828-T11-02-013  |
| Sample Name           | ND2-170828-01-PKSD-03 |
| Sample Date           | 08/28/17 05:50 PM     |
| Lab Sample Id T       | 40157940013           |
| Sample Type Code      | ENV                   |
| Sample Matrix Code    | F                     |
| Lab Anl Method Name   | SW846 8082A           |
| Dilution Factor       | 30                    |
| Qc Level              | Validated             |
| Total Or Dissolved    | N .                   |
| Result Unit           | ug/kg                 |
|                       |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 380     | 1,660  | U                 |                   |                              | 380              | 1,660           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 | 2,560                  | 380     | 1,660  |                   |                   | 2,560                        | 380              | 1,660           |                   |                               | Y    |           |
| Aroclor 1232     | 11141-16-5 |                        | 380     | 1,660  | U                 |                   |                              | 380              | 1,660           | U                 | Ü                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 380     | 1,660  | U                 |                   |                              | 380              | 1,660           | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 6,250                  | 380     | 1,660  |                   |                   | 6,250                        | 380              | 1,660           |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 3,300                  | 380     | 1,660  |                   |                   | 3,300                        | 380              | 1,660           |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 504                    | 380     | 1,660  | J                 |                   | 504                          | 380              | 1,660           | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 12,600                 | 380     | 1,660  |                   |                   | 12,600                       | 380              | 1,660           | J                 | J                             | Y    | J-TOT     |

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- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
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- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-014  |
| Sample Name          | ND2-170828-01-PKSD-02 |
| Sample Date          | 08/28/17 05:48 PM     |
| Lab Sample Id T      | 40157940014           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 50                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 569     | 2,500  | U                 |                   |                              | 569              | 2,500           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 569     | 2,500  | U                 |                   |                              | 569              | 2,500           | Ü                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 569     | 2,500  | U                 |                   | V-1F                         | 569              | 2,500           | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 569     | 2,500  | U                 |                   |                              | 569              | 2,500           | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 10,200                 | 569     | 2,500  |                   |                   | 10,200                       | 569              | 2,500           |                   |                               | Y    | 11777     |
| Aroclor 1254     | 11097-69-1 | 4,950                  | 569     | 2,500  |                   |                   | 4,950                        | 569              | 2,500           |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 |                        | 569     | 2,500  | U                 |                   |                              | 569              | 2,500           | U                 | U                             | N    |           |
| Total PCBs       | 1336-36-3  | 15,200                 | 569     | 2,500  |                   |                   | 15,200                       | 569              | 2,500           |                   |                               | Υ    |           |

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| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-015  |
| Sample Name          | ND2-170828-01-GOSH-02 |
| Sample Date          | 08/28/17 05:58 PM     |
| Lab Sample Id T      | 40157940015           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Ani Method Name  | SW846 8082A           |
| Dilution Factor      | 20                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

|                  | The second secon |                        |         |        |                   |                   |                              |                  |                 |                   |                               |      |           |
|------------------|--|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Chemical<br>Name | Cas Rn   | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
| Aroclor 1016     | 12674-11-2   |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2   | 996                    | 228     | 1,000  | J                 |                   | 996                          | 228              | 1,000           | J                 | J                             | Y    | J-RL      |
| Aroclor 1232     | 11141-16-5   |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9   |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6   | 2,930                  | 228     | 1,000  |                   |                   | 2,930                        | 228              | 1,000           |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1   | 1,260                  | 228     | 1,000  |                   |                   | 1,260                        | 228              | 1,000           |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5   | 288                    | 228     | 1,000  | J                 |                   | 288                          | 228              | 1,000           | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 5,470                  | 228     | 1,000  |                   |                   | 5,470                        | 228              | 1,000           | J                 | J                             | Y    | J-TOT     |

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- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-016  |
| Sample Name          | ND1-170828-01-PKSD-06 |
| Sample Date          | 08/28/17 05:41 PM     |
| Lab Sample Id T      | 40157940016           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 20                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1221     | 11104-28-2 |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1232     | 11141-16-5 |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1242     | 53469-21-9 |                        | 228     | 1,000  | U                 |                   |                              | 228              | 1,000           | U                 | U                             | N    |           |
| Aroclor 1248     | 12672-29-6 | 3,920                  | 228     | 1,000  |                   |                   | 3,920                        | 228              | 1,000           |                   |                               | Y    |           |
| Aroclor 1254     | 11097-69-1 | 2,120                  | 228     | 1,000  |                   |                   | 2,120                        | 228              | 1,000           |                   |                               | Y    |           |
| Aroclor 1260     | 11096-82-5 | 242                    | 228     | 1,000  | J                 |                   | 242                          | 228              | 1,000           | J                 | J                             | Y    | J-RL      |
| Total PCBs       | 1336-36-3  | 6,290                  | 228     | 1,000  |                   |                   | 6,290                        | 228              | 1,000           | J                 | J                             | Y    | J-TOT     |

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- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-017  |
| Sample Name          | ND1-170828-01-PKSD-05 |
| Sample Date          | 08/28/17 05:40 PM     |
| Lab Sample Id T      | 40157940017           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 20                    |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 227     | 997    | U                 |                   |                              | 227              | 997             | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 |                        | 227     | 997    | U                 |                   |                              | 227              | 997             | U                 | U                             | N              |           |
| Aroclor 1232     | 11141-16-5 |                        | 227     | 997    | U                 |                   |                              | 227              | 997             | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 227     | 997    | U                 |                   |                              | 227              | 997             | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 3,540                  | 227     | 997    |                   |                   | 3,540                        | 227              | 997             |                   |                               | Υ              |           |
| Aroclor 1254     | 11097-69-1 | 2,340                  | 227     | 997    |                   |                   | 2,340                        | 227              | 997             |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 | 253                    | 227     | 997    | J                 |                   | 253                          | 227              | 997             | J                 | J                             | Y              | J-RL      |
| Total PCBs       | 1336-36-3  | 6,130                  | 227     | 997    |                   |                   | 6,130                        | 227              | 997             | J                 | J                             | Υ              | J-TOT     |

#### Laboratory Qualifier Definitions:

- U-The compound/analyte was analyzed for, but was not detected above the reported sample MDL.
- B-The compound was detected in an associated method blank at a concentration exceeding the MDL.
- J-Quantitation is approximate (estimated) due a concentration less than the RL but greater than the MDL.

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Group |                       |
|-----------------------|-----------------------|
| Sys Sample Code       | COC170828-T11-02-018  |
| Sample Name           | ND1-170828-01-PKSD-03 |
| Sample Date           | 08/28/17 05:36 PM     |
| Lab Sample ld T       | 40157940018           |
| Sample Type Code      | ENV                   |
| Sample Matrix Code    | F                     |
| Lab Anl Method Name   | SW846 8082A           |
| Dilution Factor       | 5                     |
| Qc Level              | Validated             |
| Total Or Dissolved    | N                     |
| Result Unit           | ug/kg                 |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 56.9    | 250    | U                 |                   |                              | 56.9             | 250             | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 | 145                    | 56.9    | 250    | J                 |                   | 145                          | 56.9             | 250             | J                 | J                             | Υ              | J-RL      |
| Aroclor 1232     | 11141-16-5 |                        | 56.9    | 250    | U                 |                   |                              | 56.9             | 250             | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 56.9    | 250    | U                 |                   |                              | 56.9             | 250             | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 1,320                  | 56.9    | 250    |                   |                   | 1,320                        | 56.9             | 250             |                   |                               | Υ              |           |
| Aroclor 1254     | 11097-69-1 | 805                    | 56.9    | 250    |                   |                   | 805                          | 56.9             | 250             |                   |                               | Υ              |           |
| Arocior 1260     | 11096-82-5 | 116                    | 56.9    | 250    | J                 |                   | 116                          | 56.9             | 250             | J                 | J                             | Υ              | J-RL      |
| Total PCBs       | 1336-36-3  | 2,390                  | 56.9    | 250    |                   |                   | 2,390                        | 56.9             | 250             | J                 | J                             | Y              | J-TOT     |

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Group |                       |
|-----------------------|-----------------------|
| Sys Sample Code       | COC170828-T11-02-019  |
| Sample Name           | ND1-170828-01-PKSD-02 |
| Sample Date           | 08/28/17 05:35 PM     |
| Lab Sample Id T       | 40157940019           |
| Sample Type Code      | ENV                   |
| Sample Matrix Code    | F                     |
| Lab Ani Method Name   | SW846 8082A           |
| Dilution Factor       | 30                    |
| Qc Level              | Validated             |
| Total Or Dissolved    | N                     |
| Result Unit           | ug/kg                 |
|                       |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | Ver<br>Qualifiers | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|-------------------|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 342     | 1,500  | U                 |                   |                              | 342              | 1,500           | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 | 3,200                  | 342     | 1,500  |                   |                   | 3,200                        | 342              | 1,500           |                   |                               | Υ              |           |
| Aroclor 1232     | 11141-16-5 |                        | 342     | 1,500  | U                 |                   |                              | 342              | 1,500           | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 342     | 1,500  | U                 |                   |                              | 342              | 1,500           | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 6,370                  | 342     | 1,500  |                   |                   | 6,370                        | 342              | 1,500           |                   |                               | Y              |           |
| Aroclor 1254     | 11097-69-1 | 2,470                  | 342     | 1,500  |                   |                   | 2,470                        | 342              | 1,500           |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 | 496                    | 342     | 1,500  | J                 |                   | 496                          | 342              | 1,500           | J                 | J                             | Y              | J-RL      |
| Total PCBs       | 1336-36-3  | 12,500                 | 342     | 1,500  |                   |                   | 12,500                       | 342              | 1,500           | J                 | J                             | Y              | J-TOT     |

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- U\*-This compound/analyte should be considered "not detected" since it was detected in a blank at a similar level.
- J-Quantitation is approximate (estimated) due to limitations identified during the quality assurance review (data validation).
- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
- R-Unusable (rejected) result compound/analyte may or may not be present in this sample.
- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

| Sample Delivery Grou |                       |
|----------------------|-----------------------|
| Sys Sample Code      | COC170828-T11-02-020  |
| Sample Name          | ND1-170828-01-PKSD-01 |
| Sample Date          | 08/28/17 05:33 PM     |
| Lab Sample Id T      | 40157940020           |
| Sample Type Code     | ENV                   |
| Sample Matrix Code   | F                     |
| Lab Anl Method Name  | SW846 8082A           |
| Dilution Factor      | 4                     |
| Qc Level             | Validated             |
| Total Or Dissolved   | N                     |
| Result Unit          | ug/kg                 |
|                      |                       |

| Chemical<br>Name | Cas Rn     | Lab<br>Result<br>Value | Lab MDL | Lab RL | Lab<br>Qualifiers | 1 | Validated<br>Result<br>Value | Validated<br>MDL | Validated<br>RL | Val<br>Qualifiers | Final<br>Result<br>Qualifiers | Detect<br>Flag | Val Notes |
|------------------|------------|------------------------|---------|--------|-------------------|---|------------------------------|------------------|-----------------|-------------------|-------------------------------|----------------|-----------|
| Aroclor 1016     | 12674-11-2 |                        | 45.6    | 200    | U                 |   |                              | 45.6             | 200             | U                 | U                             | N              |           |
| Aroclor 1221     | 11104-28-2 | 101                    | 45.6    | 200    | J                 |   | 101                          | 45.6             | 200             | J                 | J                             | Y              | J-RL      |
| Aroclor 1232     | 11141-16-5 |                        | 45.6    | 200    | U                 |   |                              | 45.6             | 200             | U                 | U                             | N              |           |
| Aroclor 1242     | 53469-21-9 |                        | 45.6    | 200    | U                 |   |                              | 45.6             | 200             | U                 | U                             | N              |           |
| Aroclor 1248     | 12672-29-6 | 1,080                  | 45.6    | 200    |                   |   | 1,080                        | 45.6             | 200             |                   |                               | Υ              |           |
| Aroclor 1254     | 11097-69-1 | 658                    | 45.6    | 200    |                   |   | 658                          | 45.6             | 200             |                   |                               | Y              |           |
| Aroclor 1260     | 11096-82-5 | 79                     | 45.6    | 200    | J                 |   | 79                           | 45.6             | 200             | J                 | J                             | Υ              | J-RL      |
| Total PCBs       | 1336-36-3  | 1,920                  | 45.6    | 200    |                   |   | 1,920                        | 45.6             | 200             | J                 | J                             | Υ              | J-TOT     |

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- N-The analysis indicates that there is presumptive evidence to make a "tentative identification" of this compound/analyte.
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- UR-Unusable "not-detected" result; compound may or may not be present in this sample.
- UJ-This compound/analyte was not detected, but the MDL and RL are estimated due to a bias identified during the quality assurance review.

# **SECTION 3**

**ELECTRONIC DATA VERIFICATION REPORTS** 

# Verification\_Report\_40151619\_EFW2

| ************************************** |
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| ************************************** |
| ************************************** |
| ************************************** |
| ************************************** |
| ************************************** |

Page 1

| Verification Report 40151619 EFW2                                      |
|--|
| BEGIN CHECKS ON LABORATORY DUPLICATES                                  |
| ***************************************                                |
| No results qualified due to laboratory duplicate failures              |
|  |
|  |
|  |
| *********************  |
| BEGIN CHECKS ON TOTAL PCB CALCULATION                                  |
|  |
| No Deb concerns and a sure   |
| NO PCB CONGENER DATA FOUND   |
|  |
|  |
| ••••••   |
| BEGIN CHECKS ON PCB AROCLORS: SW846 8082A                              |
| No Total PCBs results qualified due to summation of validated aroclors |
| To rocal reported qualified due to summation of validated affociors    |

# Verification\_Report\_40157940\_EFW2

| *****************************  |
|--|
| BEGIN CHECKS ON HOLDING TIMES  |
| No results qualified due to holding time failures  |
| no results qualified due to notating time rationes   |
|  |
|  |
| **************************************   |
| BEGIN CHECKS ON METHOD AND FIELD BLANKS  |
| No results qualified due to method or field blanks   |
| BEGIN CHECKS ON METHOD AND FIELD BLANKS  |
| Q 1000   |
|  |
| BEGIN CHECKS ON MATRIX SPIKES  |
| BEGIN CHECKS ON MATRIX SPIKES  |
| Note: allowed limit can be either an upper limit or a lower limit  |
|  |
| Sys_Sample_Code Sample_Type_Code Lab_An1_Method_Name   |
| Chemical_Name Qualifier Allowed Limit (%) Failing Result (%)   |
| Notes  |
| COC170828-T11-02-015   |
| Allocator 1200 SATIONER apper Time - 130 atting result - 407.000   |
| COC170828-T11-02-015 ENV SW846 8082A   |
| Aroclor 1221 JAllowed upper limit = 130Failing result = 487.000  |
| 2 manult described and the second of the sec |
| 2 results qualified due to matrix spike failures   |
|  |
|  |
| *******************  |
| BEGIN CHECKS ON MATRIX SPIKE DUPLICATES  |
| No populto qualified due to metuic quile dueli act. Cailuna  |
| No results qualified due to matrix spike duplicate failures  |
|  |
|  |
| *********************  |
| BEGIN CHECKS ON SURROGATES   |
| No results qualified due to supposate failures   |
| No results qualified due to surrogate failures  Page 1   |
| Lake I   |

# Verification\_Report\_40157940\_EFW2

| ******************   |
|--|
| BEGIN CHECKS ON LABORATORY CONTROL SAMPLES                             |
| ***************************************                                |
| No results qualified due to laboratory control samples                 |
|  |
|  |
| ****************   |
| BEGIN CHECKS ON LABORATORY DUPLICATES                                  |
|  |
| No results qualified due to laboratory duplicate failures              |
|  |
|  |
| *******  |
| BEGIN CHECKS ON TOTAL PCB CALCULATION                                  |
|  |
|  |
| NO PCB CONGENER DATA FOUND   |
|  |
|  |
| :::::::::::::::::::::::::::::::::::::::                                |
| BEGIN CHECKS ON PCB AROCLORS: SW846 8082A                              |
| No Total PCBs results qualified due to summation of validated aroclors |
| quality and to Sammation of Validated at Octors                        |

# Verification\_Report\_40148598\_EFW2

| ******** BEGIN CHECKS ON HOLDING TIMES ::::::::::::::::::::::::::::::::::::            |
|--|
| **************************************   |
| **************************************   |
| ********* BEGIN CHECKS ON MATRIX SPIKE DUPLICATES :::::::::::::::::::::::::::::::::::: |
| **************************************   |
| **************************************   |

Page 1

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| Verification_Report_40148598_EFW2                         |
|---|
| BEGIN CHECKS ON LABORATORY DUPLICATES                     |
| :::::::::::::::::::::::::::::::::::::::                   |
| No results qualified due to laboratory duplicate failures |
|   |
|   |
| *********   |
| BEGIN CHECKS ON TOTAL PCB CALCULATION                     |
| :::::::::::::::::::::::::::::::::::::::                   |
|   |
| NO PCB CONGENER DATA FOUND                                |
|   |
|   |
|   |
|   |
|   |

NO PCB AROCLOR DATA FOUND

# Verification\_Report\_40151542\_EFW2

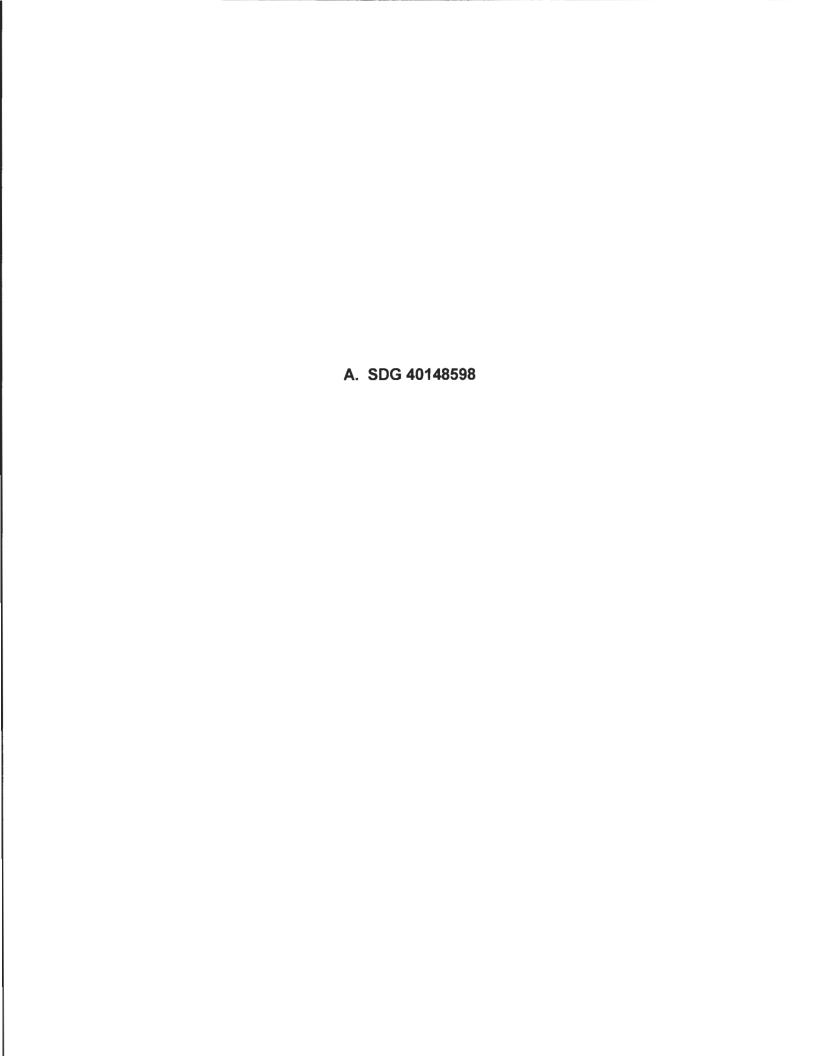
| **************************************  |
|---|
| **************************************  |
| **************************************  |
| Sys_Sample_Code Sample_Type_Code Lab_Anl_Method_Name Chemical_Name Qualifier Allowed Limit (%) Failing Result (%) Notes COC170612-T11-01-017LR LR SW846 8082A Aroclor 1260 JAllowed upper limit = 130Failing result = 136.000 |
| COC170612-T11-01-017LR LR SW846 8082A<br>Aroclor 1248 JAllowed upper limit = 130Failing result = 136.000  |
| COC170612-T11-01-017 ENV SW846 8082A Aroclor 1260 JAllowed upper limit = 130Failing result = 136.000  |
| 3 results qualified due to matrix spike failures  |
| **************************************  |

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| <pre>Verification_Report_40151542_EFW2</pre>                           |
|--|
| BEGIN CHECKS ON SURROGATES   |
|  |
| No results qualified due to surrogate failures                         |
|  |
|  |
| *******  |
|  |
| BEGIN CHECKS ON LABORATORY CONTROL SAMPLES                             |
| No posults qualified due to leberateur control complet                 |
| No results qualified due to laboratory control samples                 |
|  |
|  |
| ******************   |
| BEGIN CHECKS ON LABORATORY DUPLICATES                                  |
| ::::::::::::::::::::::::::::::::::::::                                 |
| No results qualified due to laboratory duplicate failures              |
| The results qualified due to laboratory adplicate railares             |
|  |
|  |
| *******************  |
| BEGIN CHECKS ON TOTAL PCB CALCULATION                                  |
|  |
|  |
| NO PCB CONGENER DATA FOUND   |
|  |
|  |
| :::::::::::::::::::::::::::::::::::::::                                |
| BEGIN CHECKS ON PCB AROCLORS: SW846 8082A                              |
|  |
| No Total PCBs results qualified due to summation of validated aroclors |

# **SECTION 4**

**DATA SUPPORT DOCUMENTATION** 





# ORGANIC ANALYSIS SUPPORT DOCUMENTATION

| ESI project name: Sample Collection Dates: Job Number: Project Manager: Laboratory:  Deliverable: CLP (Full) Level IV (Full) Limited | GEHR I<br>4/18/17<br>201156<br>Meg Mi<br>Pace G | 78.H00  | 00       |         | <u>Samp</u> | cable S  | Ap<br>Comple<br>Sample |        | d by: _<br>Pate: _<br>(X)   | Refer t<br>Quality | 0 Table Assu | rance f        |                        |                         |  |
|--|---|---------|----------|---------|-------------|----------|------------------------|--------|-----------------------------|--------------------|--------------|----------------|------------------------|-------------------------|--|
| Other:   | Full Per  |         | e 2      |         |             |          |                        |        |                             |                    |              |                |                        |                         |  |
| The following table indicates criteria that were examined, the identified problems,  | Che   | eck (√) | if Yes   | ed in D | tnote       | Che      | ck (√)                 | if Yes | entifie<br>or Foo<br>ents B | tnote              | Che          | Att<br>eck (√) | Document of Yes (Commo | e <b>nts</b><br>or Foot | tnote  |
| and support documentation attachments  | 8082A   |         |          |         |             | 8082A    |                        |        |                             |                    | 8082A        |                |                        |                         |  |
| Holding Times  |   |         |          |         |             |          |                        |        |                             |                    | Х            |                |                        |                         |  |
| Blank Analysis: Target Cmpds   | X   |         |          |         |             |          |                        |        |                             |                    | X            |                |                        |                         |  |
| Sys Montr Cmps/Surrogates Matrix Spike/Matrix Spike Duplicate  | X   |         |          |         |             |          |                        |        |                             |                    | Î            |                |                        |                         |  |
| Blank Spike  | $\frac{1}{x}$                                   |         |          |         |             |          |                        |        |                             |                    | X            |                |                        |                         |  |
| Duplicate Analysis ( ) Field ( X ) Lab   | X   |         |          |         |             |          |                        |        |                             |                    | Х            |                |                        |                         |  |
| Detection Limit/Sensitivity  |   |         |          |         |             |          |                        |        |                             |                    |              |                |                        |                         |  |
| Qualitative Identification: Target Cmpds   | X   |         |          |         |             |          |                        |        |                             |                    | Х            |                |                        |                         |  |
| Qualitative Identification: TICs   |   |         |          |         |             |          |                        | -      |                             |                    |              |                |                        |                         |  |
| DFTPP & BFB Mass Tuning GC Instrument Performance  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,         |         |          |         |             |          |                        |        |                             |                    |              |                |                        |                         | <u> </u>   |
| Initial Calibrations   |   |         |          |         |             |          |                        |        |                             |                    | X            |                |                        |                         | <u> </u>   |
| Continuing Calibrations  | X   |         |          |         |             |          |                        |        |                             |                    | Х            |                |                        |                         |  |
| Quantitation of Results  | Х   |         |          |         |             | Х        |                        |        |                             |                    | Х            |                |                        |                         |  |
| DDT/Endrin Breakdown   |   |         |          |         |             |          |                        |        |                             |                    |              |                |                        | <u> </u>                |  |
| Surrogate Retention Time Shifts  | X   |         |          | ,,,,    |             |          |                        |        |                             |                    | X            |                |                        |                         |  |
| Internal Standards Performance   |   |         |          |         |             |          |                        | ļ      |                             |                    |              |                |                        |                         |  |
| Resolution Check Standards Analytical Sequence   | X   |         |          |         |             |          |                        |        |                             |                    | Х            |                |                        |                         |  |
| Florisil Cartridge & GPC Calibration   | ^   |         |          |         |             |          |                        |        |                             |                    | -^-          |                |                        |                         |  |
| GC Column Agreement  |   |         |          |         |             |          |                        |        |                             |                    |              |                |                        |                         |  |
| Condition Upon Receipt   | X   |         |          |         |             |          |                        |        |                             |                    | Х            |                |                        |                         |  |
| Percent Solids   |   |         |          |         |             |          |                        |        |                             |                    |              |                |                        |                         | <u></u>  |
| Others:  |   |         |          |         |             |          |                        |        |                             |                    | <u> </u>     |                |                        |                         | 1<br>1<br>2<br>2<br>3<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4<br>4 |
| Comments: Results < RL should be co-considered estimated.  | nsidered  | estima  | ited. To | otal PC | B resu      | lts calc | culated                | with e | estimat                     | ed Aroc            | clor res     | sults sh       | nould b                | e                       |  |

# PCB - FORM II SVOA-1 TISSUE SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No.: 40148598 Contract: HUDSON RIVER REMEDIAL

Instrument ID: 40GCSK

| LAB SAMPLE ID | SAMPLE NAME          | DCBP | тсмх |
|---------------|----------------------|------|------|
| 1653810       | 1653810BLANK         | 87   | 76   |
| 1653811       | 1653811LCS           | 87   | 80   |
| 1653812       | 1653812MS            | 96   | 92   |
| 1653813       | 1653813DUP           | 88   | 82   |
| 40148598001   | TZ1-170418-01-STB-05 | 86   | 86   |
| 40148598002   | TZ1-170418-01-STB-04 | 82   | 73   |
| 40148598003   | TZ1-170418-01-STB-03 | 91   | 88   |
| 40148598004   | TZ1-170418-01-STB-02 | 95   | 102  |
| 40148598005   | TZ1-170418-01-STB-01 | 99   | 89   |

QC LIMITS

(60-140)

(60-140)

(DCBP) = Decachlorobiphenyl (S) (TCMX) = Tetrachloro-m-xylene (S)

\* Values outside of QC Limits



# **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

QC Batch:

282250

Analysis Method:

EPA 8082A Mod

QC Batch Method:

EPA 3541

Analysis Description:

8082 GCS PCB

Associated Lab Samples:

ples: 40148598001, 40148598002, 40148598003, 40148598004, 40148598005

METHOD BLANK: 1653810

Matrix: Tissue

Associated Lab Samples:

40148598001, 40148598002, 40148598003, 40148598004, 40148598005

| ug/kg<br>ug/kg<br>ug/kg | <11.4<br><11.4               | 50.0<br>50.0                                      | 11.4<br>11.4  | 03/07/18 14:30  |                 |
|-------------------------|------------------------------|---|---|-----------------|-----------------|
| 5 5                     |                              | 50.0  | 11 4  |                 |                 |
| ua/ka                   |                              |   | 11.7  | 03/07/18 14:30  |                 |
|                         | <11.4                        | 50.0  | 11.4  | 03/07/18 14:30  |                 |
| ug/kg                   | <11.4                        | 50.0  | 11.4  | 03/07/18 14:30  |                 |
| ug/kg                   | <11.4                        | 50.0  | 11.4  | 03/07/18 14:30  |                 |
| ug/kg                   | <11.4                        | 50.0  | 11.4  | 03/07/18 14:30  |                 |
| ug/kg                   | <11.4                        | 50.0  | 11.4  | 03/07/18 14:30  |                 |
| %                       | 87                           | 60-140  |   | 03/07/18 14:30  |                 |
| %                       | 76                           | 60-140  |   | 03/07/18 14:30  |                 |
|                         | ug/kg<br>ug/kg<br>ug/kg<br>% | ug/kg <11.4<br>ug/kg <11.4<br>ug/kg <11.4<br>% 87 | ug/kg <11.4 50.0<br>ug/kg <11.4 50.0<br>ug/kg <11.4 50.0<br>% 87 60-140 | ug/kg     <11.4 | ug/kg     <11.4 |

| onc. | Result <11.4 <11.4 <11.4 | % Rec | Limits         | Qualifiers                  |
|------|--------------------------|-------|----------------|-----------------------------|
| 050  | <11.4<br><11.4           |       |                |                             |
| 050  | <11.4                    |       |                |                             |
| 050  |                          |       |                |                             |
| 050  |                          |       |                |                             |
| 250  | 228                      | 91    | 70-130         |                             |
|      | <11.4                    |       |                |                             |
|      | <11.4                    |       |                |                             |
|      | <11.4                    |       |                |                             |
|      |                          | 87    | 60-140         |                             |
|      |                          | 80    | 60-140         |                             |
|      |                          | <11.4 | <11.4<br><11.4 | <11.4<br><11.4<br>87 60-140 |

| MATRIX SPIKE SAMPLE:     | 1653812 |             |       | V      |       |        |            |
|--------------------------|---------|-------------|-------|--------|-------|--------|------------|
| 5                        |         | 40148598005 | Spike | MS     | MS    | % Rec  | 0 115      |
| Parameter                | Units   | Result      | Conc. | Result | % Rec | Limits | Qualifiers |
| PCB-1016 (Aroclor 1016)  | ug/kg   | <22.8       |       | <22.8  |       |        |            |
| PCB-1221 (Aroclor 1221)  | ug/kg   | <22.8       |       | <22.8  |       |        | 1          |
| PCB-1232 (Aroclor 1232)  | ug/kg   | <22.8       |       | <22.8  |       |        | X          |
| PCB-1242 (Aroclor 1242)  | ug/kg   | <22.8       | 250   | 313    | 125   | 70-130 | 206        |
| PCB-1248 (Aroclor 1248)  | ug/kg   | 229         |       | 382    |       | <      | C+ 5       |
| PCB-1254 (Aroclor 1254)  | ug/kg   | 253         |       | 267    |       | \      | - ~        |
| PCB-1260 (Aroclor 1260)  | ug/kg   | 274         |       | 262    |       |        | Soli       |
| Decachlorobiphenyl (S)   | %       |             |       |        | 96    | 60-140 | 7          |
| Tetrachloro-m-xylene (S) | %       |             |       |        | 92    | 60-140 | · ·        |
|                          |         |             |       |        |       |        | 70         |
|                          |         |             |       |        |       |        |            |
|                          |         |             |       |        |       |        |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

# REPORT OF LABORATORY ANALYSIS

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# **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40148598

| <b>D</b>                 |       | 40148598005 | Dup    | 000 | Max | 0 1:5      |
|--------------------------|-------|-------------|--------|-----|-----|------------|
| Parameter                | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Arodor 1016)   | ug/kg | <22.8       | <22.8  |     | 40  |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | <22.8       | <22.8  |     | 40  |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <22.8       | <22.8  |     | 40  |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <22.8       | <22.8  |     | 40  |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | 229         | 176    | 26  | 40  |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | 253         | 195    | 26  | 40  |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | 274         | 211    | 26  | 40  |            |
| Decachlorobiphenyl (S)   | %     | 99          | 88     | 11  |     |            |
| Tetrachloro-m-xylene (S) | %     | 89          | 82     | 9   |     |            |

| SAMPLE DUPLICATE: 1653814 |       |             |        |     |     |            |
|---------------------------|-------|-------------|--------|-----|-----|------------|
|                           |       | 40148671004 | Dup    |     | Max |            |
| Parameter                 | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1221 (Aroclor 1221)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1232 (Aroclor 1232)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1242 (Aroclor 1242)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1248 (Aroclor 1248)   | ug/kg | 21.8J       | 26.7J  |     | 40  |            |
| PCB-1254 (Aroclor 1254)   | ug/kg | 31.3J       | 39.2J  |     | 40  |            |
| PCB-1260 (Aroclor 1260)   | ug/kg | 65.8        | 84.4   | 25  | 40  |            |
| Decachlorobiphenyl (S)    | %     | 71          | 89     | 22  |     |            |
| Tetrachloro-m-xylene (S)  | %     | 67          | 80     | 17  |     |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

40148598\_Rev2



# **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

QC Batch:

Lipid

Lipid

Lipid

Lipid

282285

Analysis Method:

Pace Lipid

QC Batch Method:

Pace Lipid

Analysis Description:

LIPID

Associated Lab Samples:

40148598001, 40148598002, 40148598003, 40148598004, 40148598005

METHOD BLANK: 1653924

Matrix: Tissue

Reporting

Associated Lab Samples:

40148598001, 40148598002, 40148598003, 40148598004, 40148598005 Blank

Parameter Units Result %

Analyzed Limit MDL 0.030 0.030

2.5

03/07/18 06:41

Qualifiers

MATRIX SPIKE SAMPLE:

1682000

%

Parameter Units 40148598005 Result

2.7

2.7

< 0.030

Spike MS Result Conc.

MS % Rec % Rec Limits

Qualifiers

SAMPLE DUPLICATE: 1653927

Parameter Units %

40148598005 Result

Dup Result 2.1

Max RPD

Qualifiers

25

SAMPLE DUPLICATE:

Parameter Units %

40148671004 Result 1.6

Dup Result 2.2

RPD 27

RPD

Max RPD 40

40

Qualifiers

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

# REPORT OF LABORATORY ANALYSIS

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# PCB - FORM III SVOA-1 TISSUE LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay

Date Extracted: 03/02/2018

Instrument: 40GCSK

Lab File ID: 030718.B\030718013.D

Lab Sample ID: 1653811LCS

Date Analyzed (1): 03/07/2018

LCS Lot No: 182336

SDG No.: 40148598

| COMPOUND                | AMOUNT ADDED (ug/kg) | LCS CONCENTRATION (ug/kg) | LCS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|----------------------|---------------------------|----------|----------------------|
| PCB-1242 (Aroclor 1242) | 250                  | 228                       | 91       | 70-130               |

Spike Recovery: 0 out of 1 outside limits.

# PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

| SAMPLE NO. |  |
|------------|--|
| MS         |  |

| Lab Name: Pace Analytical - Green Bay |  |         | t: HUDSON RIVER REMEDIAL A        | CTION M |  |  |
|---------------------------------------|--|---------|-----------------------------------|---------|--|--|
| Date Received: 04/19/2017 09:30       |  |         | Matrix: Tissue SDG No.: 40148598  |         |  |  |
| Date Extracted: 03/02/2018 06:50      |  |         | Lab Sample ID: 1653812            |         |  |  |
| Date Analyzed: 03/07/2018 15:02       |  |         | Lab File ID: 030718.B\030718015.D |         |  |  |
| Initial wt/vol: 9                     | .9892 g_Final wt/vol: 5 mL _ Dilution: 2 | Instrum | ent: 40GCSK Percent Mo            | isture: |  |  |
| CAS NO.                               | COMPOUND                                 |         | CONCENTRATION UNITS: ug/kg        | g Q     |  |  |
| 12674-11-2                            | PCB-1016 (Aroclor 1016)                  |         | <22.8                             | U       |  |  |
| 11104-28-2                            | PCB-1221 (Aroclor 1221)                  |         | <22.8                             | U       |  |  |
| 11141-16-5                            | PCB-1232 (Aroclor 1232)                  |         | <22.8                             | U       |  |  |
| 53469-21-9                            | PCB-1242 (Aroclor 1242)                  |         | 313                               |         |  |  |
| 12672-29-6                            | PCB-1248 (Aroclor 1248)                  |         | 382                               |         |  |  |
| 11097-69-1                            | PCB-1254 (Aroclor 1254)                  |         | 267                               |         |  |  |
| 11096-82-5                            | PCB-1260 (Aroclor 1260)                  |         | 262                               |         |  |  |

# PCB - FORM III SVOA-1 TISSUE SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Green Bay

Matrix Spike - Sample No: 1653812MS

Date Extracted: 03/02/2018

Date Analyzed (1): 03/07/2018

Instrument: 40GCSK

Lab File ID: 030718.B\030718015.D

Parent Sample ID: TZ1-170418-01-STB-01

SDG No.: 40148598

| COMPOUND                | SPIKE ADDED<br>(ug/kg) | SAMPLE<br>CONCENTRATION (ug/kg) | MS CONCENTRATION (ug/kg) | MS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|------------------------|---------------------------------|--------------------------|---------|----------------------|
| PCB-1242 (Aroclor 1242) | 250                    | <22.8                           | 313                      | 125     | 70-130               |

57

102%

(refer to recele Spreadsheet)

Spike Recovery: 0 out of 1 outside limits.

04/27/2018 9:33

**Sample** TZ1-170418-01-STB-01

**Wt** = 10.016

**DF** = 2

|       |        | Area   | Avg CF      | On Column       | Peak Result                | Aroclor Result          |
|-------|--------|--------|-------------|-----------------|----------------------------|-------------------------|
| A1242 | PCB-6  | 123299 | 2535757.250 | 0.05            | 49                         | <b>57</b> ug/kg         |
|       | PCB-7  | 143105 | 2567918.200 | 0.06            | 56                         |                         |
|       | PCB-8  | 661114 | 7622055.100 | 0.09            | 87                         |                         |
|       | PCB-9  | 143477 | 3224394.900 | 0.04            | 44                         |                         |
|       | PCB-10 | 107510 | 2170022.350 | 0.05            | 49                         |                         |
|       |        |        |             |                 |                            |                         |
|       |        |        |             | (Area / Avg CF) | (On Column * DF * 5000/Wt) | (Avg of 5 Peak Results) |

# Recalc MS %Rec

Spike Added 250 ug/kg Sample Conc. 57 ug/kg MS Conc. 313 ug/kg

MS %Rec **102**%

#### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

| SAMPLE NO. |  |
|------------|--|
| DUP        |  |

| Lab Name: Pag   | ce Analytical - Green Bay               | Contract: HUDSON RIVER REMEDIAL ACTION M |  |  |  |  |  |  |  |
|-----------------|---|--|--|--|--|--|--|--|--|
| Date Received:  | 04/19/2017 09:30                        | Matrix: Tissue SDG No.: 40148598         |  |  |  |  |  |  |  |
| Date Extracted: | 03/02/2018 06:50                        | Lab Sample ID: 1653813                   |  |  |  |  |  |  |  |
| Date Analyzed:  | 03/07/2018 16:39                        | Lab File ID: 030718.B\030718027.D        |  |  |  |  |  |  |  |
| Initial wt/vol: | 9.9969 g Final wt/vol: 5 mL Dilution: 2 | Instrument: 40GCSK Percent Moisture:     |  |  |  |  |  |  |  |
| CAS NO.         | COMPOUND                                | CONCENTRATION UNITS: ug/kg               |  |  |  |  |  |  |  |
| 12674-11-2      | PCB-1016 (Aroclor 1016)                 | <22.8 U                                  |  |  |  |  |  |  |  |
| 11104-28-2      | PCB-1221 (Aroclor 1221)                 | <22.8 U                                  |  |  |  |  |  |  |  |
| 11141-16-5      | PCB-1232 (Aroclor 1232)                 | <22.8 U                                  |  |  |  |  |  |  |  |
| 53469-21-9      | PCB-1242 (Aroclor 1242)                 | <22.8 / U                                |  |  |  |  |  |  |  |
| 12672-29-6      | PCB-1248 (Aroclor 1248)                 | 176                                      |  |  |  |  |  |  |  |
| 11097-69-1      | PCB-1254 (Aroclor 1254)                 | 195                                      |  |  |  |  |  |  |  |
| 11096-82-5      | PCB-1260 (Aroclor 1260)                 | 211 🗸                                    |  |  |  |  |  |  |  |

Needs updated raw data
Received 61118

### PCB - FORM III SVOA-2 TISSUE SEMI-VOLATILE SAMPLE/DUPLICATE RECOVERY

| Lab Name: Pace Analytical - Green Bay      | Duplicate Sample No: 40148598005DUP |
|--|-------------------------------------|
| Date Extracted: 03/02/2018                 | Date Analyzed: 03/07/2018           |
| Instrument 40GCSK                          | Lab File ID: 030718.B\030718027.D   |
| Lab Sample ID: <u>TZ1-170418-01-STB-01</u> | SDG No.: 40148598                   |

| COMPOUND                | SAMPLE<br>CONCENTRATION (ug/kg) | DUPLICATE<br>CONCENTRATION (ug/kg) | RPD | RPD<br>LIMITS |
|-------------------------|---------------------------------|------------------------------------|-----|---------------|
| PCB-1016 (Aroclor 1016) | <22.8                           | <22.8                              |     | 0-40          |
| PCB-1221 (Aroclor 1221) | <22.8                           | <22.8                              |     | 0-40          |
| PCB-1232 (Aroclor 1232) | <22.8                           | <22.8                              |     | 0-40          |
| PCB-1242 (Aroclor 1242) | <22.8                           | <22.8                              |     | 0-40          |
| PCB-1248 (Aroclor 1248) | 229                             | 176                                | 26  | 0-40          |
| PCB-1254 (Aroclor 1254) | 253                             | 195                                | 26  | 0-40          |
| PCB-1260 (Aroclor 1260) | 274                             | 211                                | 26  | 0-40          |

RPD: 0 out of 3 outside limits.

### PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analytic      | cal - Gre | en Bay Ir        | nstrument ID:     | 40GCSK              | _GC Colum     | n: Col 2 | _SDG No.: 401    | 48598 |
|------------------------------|-----------|------------------|-------------------|---------------------|---------------|----------|------------------|-------|
| Calibration Date(s):         | 03/06/20  | 18 03/06         | /2018             |                     | Calibration T | ime(s):  | 11:50            | 19:23 |
| LAB FILE ID                  |           |                  |                   |                     |               |          |                  |       |
| CAL1A = 030618.B\0306        | 618055.D  | CAL              | IB = <u>03061</u> | 8.B\03061801        | 9.D (         | CAL1C =  | 030618.B\0306180 | 043.D |
| CAL1D = 030618.B\0306        | 618031.D  | CAL              | IF = <u>03061</u> | 8.B\03061800        | 7.D (         | CAL2A =  | 030618.B\0306180 | 057.D |
| CAL2B = <u>030618.B\0306</u> | 618021.D  | CAL2             | 2C = 03061        | 8.B\03061804        | 5.D (         | CAL2D =  | 030618.B\0306180 | 033.D |
| CAL2F = 030618.B\0306        | 618009.D  | CAL              | BA = 03061        | 8.B\03061805        | 9.D (         | CAL3B =  | 030618.B\0306180 | 023.D |
| CAL3C = 030618.B\0306        | 618047.D  | CAL3             | BD = 03061        | 8.B\03061803        | 5.D (         | CAL3F =  | 030618.B\0306180 | 011.D |
| CAL4A = 030618.B\0306        | 618061.D  | CAL <sup>2</sup> | 4B = 03061        | 8.B\03061802        | 5.D (         | CAL4C =  | 030618.B\0306180 | 049.D |
| CAL4D = 030618.B\0306        | 618037.D  | CAL4             | 1F = 03061        | 8.B\03061801        | 3.D (         | CAL5A =  | 030618.B\0306180 | 063.D |
| CAL5B = 030618.B\0306        | 618027.D  | CAL              | SC = 03061        | 8.B\03061805        | 1.D (         | CAL5D =  | 030618.B\0306180 | 039.D |
| CAL5F = 030618.B\0306        | 618015.D  |                  |                   |                     |               |          |                  | _     |
| COMPOUND                     | PEAK      | CURVE TYPE       | CAL1              | CAL2                | CAL3          | CAL4     | CAL5             |       |
| Aroclor 1016                 | 1         | Averaged         | 3274960.00        | 3269125.00          | 2967228.00    | 2876502  | 50 2833165.00    |       |
| Aroclor 1016                 | 2         | Averaged         | 3332330.00        | 3269300.00          | 3041946.00    | 2965638. | 75 2917635.00    |       |
| Aroclor 1016                 | 3         | Averaged         | 10034310.0        | 9782660.00          | 9019746.00    | 8890233. | 75 8852360.00    |       |
| Aroclor 1016                 | 4         | Averaged         | 4266510.00        | 4178970.00          | 3846018.00    | 3738796. | 25 3709517.00    |       |
| Aroclor 1016                 | 5         | Averaged         | 2849090.00        | 2749005.00          | 2570538.00    | 2549456. | 25 2519627.00    | 1     |
| Aroclor 1221                 | 1         | Averaged         | 1110420.00        | 1103425.00          | 945020.000    | 910096.2 | 50 903333.000    |       |
| Aroclor 1221                 | 2         | Averaged         | 628250.000        | 597435.000          | 497196.000    | 475523.7 | 50 476187.000    |       |
| Aroclor 1221                 | 3         | Averaged         | 1569240.00        | 1512205.00          | 1331512.00    | 1308573. | 75 1318154.00    |       |
| Aroclor 1221                 | 4         | Averaged         | 1215040.00        | 1160490.00          | 1042040.00    | 1042850  | 00 1086008.00    |       |
| Aroclor 1221                 | 5         | Averaged         | 3715370.00        | 3661410.00          | 3215342.00    | 3095605  | 00 3118782.00    |       |
| Aroclor 1242                 | 1         | Averaged         | 2772040.00        | <b>/</b> 2679645.00 | 2557954.00    | 2351651. | 25 2317496.00    |       |
| Aroclor 1242                 | 2         | Averaged         | 2806130.00        | 2680745.00          | 2580668.00    | 2393405. | 00 2378643.00    |       |
| Aroclor 1242                 | 3         | Averaged         | 8271950.00        | 8044450.00          | 7576140.00    | 7104127  | 50 7113608.00    |       |
| Aroclor 1242                 | 4         | Averaged         | 3466350.00        | 3409535.00          | 3231120.00    | 3013197. | 50 3001772.00    |       |
| Aroclor 1242                 | 5         | Averaged         | 2413760.00        | 2226755.00          | 2158228.00    | 2024763. | 75 2026605.00    |       |
| Aroclor 1248                 | 1         | Averaged         | 2682600.00        | 2616675.00          | 2492950.00    | 2322222. | 50 2301058.00    |       |
| Aroclor 1248                 | 2         | Averaged         | 4852200.00        | 4733360.00          | 4356412.00    | 4215287. | 50 4121810.00    |       |
| Aroclor 1248                 | 3         | Averaged         | 2221540.00        | 2207835.00          | 2183646.00    | 2072852. | 50 2072505.00    |       |
| Aroclor 1248                 | 4         | Averaged         | 6082770.00        | 5910720.00          | 5645056.00    | 5290598. | 75 5270595.00    |       |
| Aroclor 1248                 | 5         | Averaged         | 4085740.00        | 4082825.00          | 3960156.00    | 3781821. | 25 3798047.00    |       |
| Aroclor 1254                 | 1         | Averaged         | 6289850.00        | 6108865.00          | 5620860.00    | 5224048. | 75 5183400.00    |       |
| Aroclor 1254                 | 2         | Averaged         | 5008700.00        | 4969335.00          | 4691654.00    | 4432146. | 25 4413390.00    |       |
| Aroclor 1254                 | 3         | Averaged         | 9464310.00        | 9078570.00          | 8491582.00    | 8088543. | 75 7970155.00    |       |
| Aroclor 1254                 | 4         | Averaged         | 5516070.00        | 5619905.00          | 5413152.00    | 5154030. | 00 5149284.00    |       |
| Aroclor 1254                 | 5         | Averaged         | 7899580.00        | 7830800.00          | 7303862.00    | 6896545. | 00 6825769.00    |       |
| Aroclor 1260                 | 1         | Averaged         | 10586190.0        | 10245735.0          | 9520516.00    | 9316422. | 50 9314568.00    |       |
| Aroclor 1260                 | 2         | Averaged         | 12483220.0        | 11815745.0          | 11226176.0    | 1095835  | 5.0 10961506.0   |       |
| Aroclor 1260                 | 3         | Averaged         | 5800280.00        | 5722275.00          | 5488182.00    | 5335001. | 25 5359146.00    |       |
| Aroclor 1260                 | 4         | Averaged         | 3583250.00        | 3572920.00          | 3347800.00    | 3174366. | 25 3180579.00    |       |

#### PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name    | : Pace Analytic                   | al - Gre | en Bay    | Instrum                      | ent ID:              | 40GCSK               | _GC Columi                            | n: <u>Col 2</u>        | _SDG N            | o.: <u>4014</u> | 8598  |
|-------------|-----------------------------------|----------|-----------|------------------------------|----------------------|----------------------|---------------------------------------|------------------------|-------------------|-----------------|-------|
| Calibration | Date(s):(                         | 03/06/20 | 18 03/    | 6/2018                       |                      | (                    | Calibration T                         | ime(s):                | 11:50             |                 | 19:23 |
| LAB FILE    | ID                                |          |           |                              |                      |                      |                                       |                        |                   |                 |       |
| CAL1A =     | CAL1A = 030618.B\030618055.D      |          | ) CA      | CAL1B = 030618.B\030618019.D |                      | 9.D C                | CAL1C = 030618.B\03                   |                        | \03061804         | 43.D            |       |
| CAL1D =     | 030618.B\030618031.D              |          | ) CA      | L1F =                        | 030618.B\030618007.D |                      | 7.D C                                 | CAL2A =                | 030618.B          | \0306180        | 57.D  |
| CAL2B =     | L2B = <u>030618.B\030618021.D</u> |          | ) CA      | L2C =                        | 03061                | 8.B\030618045        | 5.D C                                 | CAL2D =                | 030618.B\03061803 |                 | 33.D  |
| CAL2F =     | 2F = 030618.B\030618009.D         |          |           | L3A =                        | 03061                | 618.B\030618059.D    |                                       | AL3B = 030618.B\030618 |                   | \03061802       | 23.D  |
| CAL3C =     | 3C = 030618.B\030618047.D         |          | ) CA      | L3D =                        | 03061                | 8.B\030618035        | 5.D C                                 | CAL3F =                | 030618.B          | \0306180        | 11.D  |
| CAL4A =     | 030618.B\0306                     | 318061.D | CA        | L4B =                        | 03061                | 8.B\030618025        | 5.D C                                 | CAL4C =                | 030618.B          | \03061804       | 49.D  |
| CAL4D =     | 030618.B\0306                     | 618037.D | ) CA      | CAL4F = <u>030</u>           |                      | 030618.B\030618013.D |                                       | CAL5A =                | 030618.B          | \03061806       | 63.D  |
| CAL5B =     | 030618.B\0306                     | 618027.D | ) CA      | AL5C = 0306                  |                      | 30618.B\030618051.D  |                                       | CAL5D =                | 030618.B          | \03061803       | 39.D  |
| CAL5F =     | 030618.B\0306                     | 318015.D | )         |                              |                      |                      | · · · · · · · · · · · · · · · · · · · |                        |                   |                 |       |
| сомрои      | ND                                | PEAK     | CURVE TYP | E CA                         | AL1                  | CAL2                 | CAL3                                  | CAL4                   | С                 | AL5             |       |
| Aroclor 12  | 60                                | 5        | Averaged  | 3282                         | 580.00               | 3215065.00           | 3088340.00                            | 2957420                | .00 2956          | 6178.00         |       |
| Decachlor   | obiphenyl (S)                     |          | Averaged  | 14569                        | 96800.               | 133321250.           | 127203300.                            | 1198343                | 70. 1184          | 176320.         |       |
| Tetrachlor  | o-m-xvlene                        |          | Averaged  | 1231                         | 59700. <b>v</b>      | 120374450.           | 114832240.                            | 1164799                | 50. 1172          | 270820.         |       |

### PCB - FORM VI SVOA-3 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analytic | cal - Gre | en Bay In  | strument ID: | 40GCSK         | GC Colu     | mn: Col 2 | SDG No.    | 40148598   |
|-------------------------|-----------|------------|--------------|----------------|-------------|-----------|------------|------------|
| Calibration Date(s):    | 03/06/20  | 18 03/06/  | 2018         |                | Calibration | Time(s):  | 11:50      | 19:23      |
| LAB FILE ID             |           |            |              |                |             |           |            |            |
| CAL1A = 030618.B\0306   | 318055.D  | CAL1       | B = 03061    | 18.B\030618019 | 9.D         | CAL1C =   | 030618.B\0 | 30618043.D |
| CAL1D = 030618.B\0306   |           |            | -            | 18.B\030618007 |             | CAL2A =   |            | 30618057.D |
| CAL2B = 030618.B\0306   | 518021.D  | CAL2       |              | 8.B\030618045  |             | CAL2D =   |            | 30618033.D |
| CAL2F = 030618.B\0306   | 618009.D  |            |              | 8.B\030618059  | 9.D         | CAL3B =   |            | 30618023.D |
| CAL3C = 030618.B\0306   | 618047.D  | CAL3       | D = 03061    | 8.B\030618035  | 5.D         | CAL3F =   | 030618.B\0 | 30618011.D |
| CAL4A = 030618.B\0306   | 518061.D  | CAL4       | B = 03061    | 8.B\03061802   | 5.D         | CAL4C =   | 030618.B\0 | 30618049.D |
| CAL4D = 030618.B\0306   | 318037.D  | CAL4       |              | 8.B\030618013  |             | CAL5A =   | 030618.B\0 | 30618063.D |
| CAL5B = 030618.B\0306   | 518027.D  | CAL5       | C = 03061    | 8.B\03061805   | 1.D         | CAL5D =   | 030618.B\0 | 30618039.D |
| CAL5F = 030618.B\0306   | 318015.D  | )          |              |                |             |           |            |            |
| COMPOUND                | PEAK      | CURVE TYPE | %RSD         | R2             | A1          | A2        | A          | 3          |
| Aroclor 1016            | 1         | Averaged   | 7.01         |                |             | 3044196   | 6.10       |            |
| Aroclor 1016            | 2         | Averaged   | 5.96         |                |             | 3105369   | 9.95       |            |
| Aroclor 1016            | 3         | Averaged   | 5.92         |                |             | 931586    | 1.95       |            |
| Aroclor 1016            | 4         | Averaged   | 6.52         |                |             | 3947962   | 2.25       |            |
| Aroclor 1016            | 5         | Averaged   | 5.43         |                |             | 2647543   | 3.25       |            |
| Aroclor 1221            | 1         | Averaged   | 10.44        |                |             | 994458    | .85        |            |
| Aroclor 1221            | 2         | Averaged   | 13.55        |                |             | 534918    | .35        |            |
| Aroclor 1221            | 3         | Averaged   | 8.74         |                |             | 1407936   | 6.95       |            |
| Aroclor 1221            | 4         | Averaged   | 6.87         |                |             | 1109285   | 5.60       |            |
| Aroclor 1221            | 5         | Averaged   | 9.00         |                |             | 336130    | 1.80       |            |
| Aroclor 1242            | 1         | Averaged   | 7.85         |                |             | 2535757   | 7.25       |            |
| Aroclor 1242            | 2         | Averaged   | 7.17         |                |             | 2567918   | 3.20       |            |
| Aroclor 1242            | 3         | Averaged   | 6.97         |                |             | 7622055   | 5.10       |            |
| Aroclor 1242            | 4         | Averaged   | 6.70         |                |             | 3224394   | 4.90       |            |
| Aroclor 1242            | 5         | Averaged   | 7.44         |                |             | 2170022   | 2.35       |            |
| Aroclor 1248            | 1         | Averaged   | 6.88         |                |             | 2483101   | 1.10       |            |
| Aroclor 1248            | 2         | Averaged   | 7.21         |                |             | 4455813   | 3.90       |            |
| Aroclor 1248            | 3         | Averaged   | 3.41         |                |             | 2151675   | 5.70       |            |
| Aroclor 1248            | 4         | Averaged   | 6.44         |                |             | 5639947   | 7.95       |            |
| Aroclor 1248            | 5         | Averaged   | 3.74         |                |             | 3941717   |            |            |
| Aroclor 1254            | 1         | Averaged   | 8.85         |                |             | 5685404   | 4.75       |            |
| Aroclor 1254            | 2         | Averaged   | 6.03         |                |             | 4703045   |            |            |
| Aroclor 1254            | 3         | Averaged   | 7.43         |                |             | 8618632   | 2.15       |            |
| Aroclor 1254            | 4         | Averaged   | 3.96         |                |             | 5370488   |            |            |
| Aroclor 1254            | 5         | Averaged   | 6.85         |                |             | 7351311   |            |            |
| Aroclor 1260            | 1         | Averaged   | 5.96         |                |             | 9796686   |            |            |
| Aroclor 1260            | 2         | Averaged   |              | /              |             | 1148900   |            |            |
| Aroclor 1260            | 3         | Averaged   | 3.81         |                |             | 5540976   |            |            |
| Aroclor 1260            | 4         | Averaged   | 5.95         |                |             | 3371783   | 3.05       |            |

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

04/27/2018 9:33

#### PCB - FORM VI SVOA-4 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name                            | : Pace Analytic             | cal - Gre | en Bay              | Instrumen            | nt ID:       | 40GCSK             | GC Colu       | ımn: <u>Col</u> | <u>2</u> S           | DG No.: 40    | 148598 |
|-------------------------------------|-----------------------------|-----------|---------------------|----------------------|--------------|--------------------|---------------|-----------------|----------------------|---------------|--------|
| Calibration                         | Date(s):(                   | 03/06/20  | 18 03/0             | 6/2018               |              |                    | Calibration   | Time(s)         | ·                    | 11:50         | 19:23  |
| LAB FILE                            | ID                          |           |                     |                      |              |                    |               |                 |                      |               |        |
| CAL1A = <u>030618.B\030618055.D</u> |                             | CA        | _ CAL1B =030618.B\/ |                      | 8.B\03061801 | 8.B\030618019.D    |               | = <u>030</u>    | 030618.B\030618043.D |               |        |
| CAL1D =                             | 030618.B\030618031.D        |           | CA                  | L1F = <u>C</u>       | 3061         | 8.B\03061800       | 007.D CAL2A = |                 | = <u>030</u>         | 0618.B\030618 | 8057.D |
| CAL2B =                             | .2B = 030618.B\030618021.D  |           | CA                  | L2C = <u>C</u>       | 3061         | 8.B\03061804       | 15.D          | CAL2D           | = 030                | 0618.B\030618 | 3033.D |
| CAL2F =                             | AL2F = 030618.B\030618009.D |           | CA                  | CAL3A = <u>03061</u> |              | 0618.B\030618059.D |               | CAL3B           | = 030                | 0618.B\030618 | 3023.D |
| CAL3C =                             | C = 030618.B\030618047.D    |           | CA                  | L3D = <u>C</u>       | 3061         | 8.B\03061803       | 35.D          | CAL3F           | = 030                | 0618.B\030618 | 3011.D |
| CAL4A =                             | 030618.B\0306               | 618061.D  | CA                  | L4B = <u>C</u>       | 3061         | 8.B\03061802       | 25.D          | CAL4C           | = 030                | 0618.B\030618 | 3049.D |
| CAL4D =                             | 030618.B\0306               | 618037.D  | CA                  | CAL4F = 03061        |              | 0618.B\030618013.D |               | CAL5A           | = 030                | 0618.B\030618 | 3063.D |
| CAL5B =                             | 030618.B\0306               | 618027.D  | CA                  | CAL5C = 03061        |              | 0618.B\030618051.D |               | CAL5D           | = 030                | 0618.B\030618 | 3039.D |
| CAL5F =                             | 030618.B\0306               | 618015.D  |                     |                      |              |                    |               |                 |                      |               | _      |
| COMPOU                              | ND                          | PEAK      | CURVE TYP           | € %RS                | D            | R2                 | A1            |                 | A2                   | A3            |        |
| Aroclor 12                          | :60                         | 5         | Averaged            | 4.77                 | 7            |                    |               | 309             | 9916.60              |               |        |
| Decachlor                           | obiphenyl (S)               |           | Averaged            | 8.63                 | 3            |                    |               | 1289            | 06408.0              |               |        |
| Tetrachloro-m-xylene                |                             |           | Averaged            | 2.80                 | )            |                    |               | 1184            | 23432.0              |               |        |



## PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name: Pace Analytic | al - Gree             | en Bay | Instrume | ent ID: 40G0         | CSKGC     | Column     | : <u>Col 2</u> | SDG No.: 4    | 0148598 |
|-------------------------|-----------------------|--------|----------|----------------------|-----------|------------|----------------|---------------|---------|
| Calibration Date(s):    | )3/06/20 <sup>2</sup> | 18 03/ | 06/2018  |                      | Calib     | oration Ti | me(s):         | 11:50         | 19:23   |
| LAB FILE ID             |                       |        |          |                      |           |            |                |               |         |
| CAL1A = 030618 B\0306   | 618055.D              | CA     | AL1B =   | 030618.B\030618019.D |           |            | AL1C =         | 18043.D       |         |
| CAL1D = 030618.B\0306   | 518031.D              |        | \L1F =   | 030618.B\030         | 0618007.D | C          | AL2A =         | 030618.B\0306 | 18057.D |
| CAL2B = 030618.B\0306   | 518021.D              |        | AL2C =   | 030618.B\030         | 0618045.D | c          | AL2D =         | 030618.B\0306 | 18033.D |
| CAL2F = 030618.B\0306   | 518009.D              |        | AL3A =   | 030618.B\030         | 0618059.D | C          | AL3B =         | 030618.B\0306 | 18023.D |
| CAL3C = 030618.B\0306   | 518047.D              |        | AL3D =   | 030618.B\030         | 0618035.D |            | AL3F =         | 030618.B\0306 | 18011.D |
| CAL4A = 030618.B\0306   | 518061.D              |        | AL4B =   | 030618.B\030         | 0618025.D |            | AL4C =         | 030618.B\0306 |         |
| CAL4D = 030618.B\0306   |                       |        | AL4F =   | 030618.B\030         |           |            | AL5A =         | 030618.B\0306 |         |
| CAL5B = 030618.B\0306   | 518027.D              |        | AL5C =   | 030618.B\030         |           |            | AL5D =         | 030618.B\0306 | 18039.D |
| CAL5F = 030618.B\0306   |                       |        |          |                      |           |            |                |               |         |
| COMPOUND                | PEAK                  | CAL1   | CAL2     | CAL3                 | CAL4      | CAL5       | RT             | _ RT W        | INDOW   |
| COMI COND               | I LAK                 | OALI   | UALZ     | CALS                 | UAL4      | CALS       | 171            | FROM          | ТО      |
| Aroclor 1016            | 1                     | 3.398  | 3.397    | 3.396                | 3.397     | 3.397      | 3.39           | 3.363         | 3.431   |
| Aroclor 1016            | 2                     | 3.594  | 3.596    | 3.595                | 3.595     | 3.594      | 3.59           | 3.561         | 3.629   |
| Aroclor 1016            | 3                     | 3.91   | 3.91     | 3.91                 | 3.91      | 3.91       | 3.9            | 1 3.876       | 3.944   |
| Aroclor 1016            | 4                     | 4.014  | 4.014    | 4.013                | 4.013     | 4.013      | 4.01           | 13 3.979      | 4.047   |
| Aroclor 1016            | 5                     | 4.079  | 4.079    | 4.079                | 4.079     | 4.079      | 4.07           | 79 4.045      | 4.113   |
| Aroclor 1221            | 1                     | 1.854  | 1.854    | 1.854                | 1.854     | 1.854      | 1.85           | 1.819         | 1.887   |
| Aroclor 1221            | 2                     | 2.471  | 2.472    | 2.474                | 2.473     | 2.473      | 2.47           | 72 2.438      | 2.506   |
| Aroclor 1221            | 3                     | 2.759  | 2.76     | 2.76                 | 2.759     | 2.759      | 2.7            | 6 2.726       | 2.794   |
| Aroclor 1221            | 4                     | 2.862  | 2.862    | 2.862                | 2.861     | 2.862      | 2.86           | 32 2.828      | 2.896   |
| Aroclor 1221            | 5                     | 2.925  | 2.925    | 2.925                | 2.925     | 2.925      | 2.92           | 26 2.892      | 2.96    |
| Aroclor 1242            | 1                     | 3.397  | 3.397    | 3.397                | 3.397     | 3.398      | 3.39           | 3.364         | 3.432   |
| Aroclor 1242            | 2                     | 3.596  | 3.596    | 3.595                | 3.595     | 3.596      | 3.59           | 3.562         | 3.63    |
| Aroclor 1242            | 3                     | 3.91   | 3.911    | 3.91                 | 3.91      | 3.911      | 3.9            | 1 3.876       | 3.944   |
| Aroclor 1242            | 4                     | 4.013  | 4.014    | 4.014                | 4.014     | 4.013      | 4.01           | 13 3.979      | 4.047   |
| Aroclor 1242            | 5                     | 4.079  | 4.08     | 4.08                 | 4.079     | 4.079      | 4.0            | 8 4.046       | 4.114   |
| Aroclor 1248            | 1                     | 4.347  | 4.345    | 4.346                | 4.346     | 4.346      | 4.34           | 4.313         | 4.381   |
| Aroclor 1248            | 2                     | 4.633  | 4.633    | 4.632                | 4.632     | 4.632      | 4.63           | 32 4.598      | 4.666   |
| Aroclor 1248            | 3                     | 4.901  | 4.9      | 4.9                  | 4.9       | 4.9        | 4.9            | 4.866         | 4.934   |
| Aroclor 1248            | 4                     | 4.966  | 4.967    | 4.966                | 4.966     | 4.966      | 4.96           | 4.933         | 5.001   |
| Aroclor 1248            | 5                     | 5.127  | 5.126    | 5.126                | 5.126     | 5.125      | 5.12           | 5.093         | 5.161   |
| Aroclor 1254            | 1                     | 5.25   | 5.25     | 5.249                | 5.249     | 5.249      | 5.24           | 19 5.215      | 5.283   |
| Aroclor 1254            | 2                     | 5.496  | 5.495    | 5.495                | 5.495     | 5.494      | 5.49           | 5.462         | 5.53    |
| Aroclor 1254            | 3                     | 5.598  | 5.598    | 5.598                | 5.598     | 5.597      | 5.59           | 98 5.564      | 5.632   |
| Aroclor 1254            | 4                     | 6.117  | 6.116    | 6.115                | 6.115     | 6.115      | 6.11           | 6.083         | 6.151   |
| Aroclor 1254            | 5                     | 6.388  | 6.388    | 6.387                | 6.388     | 6.387      | 6.38           | 6.354         | 6.422   |
| Aroclor 1260            | 1                     | 6.388  | 6.389    | 6.389                | 6.389     | 6.387      | 6.38           | 88 6.354      | 6.422   |
| Aroclor 1260            | 2                     | 7.093  | 7.093    | 7.092                | 7.093     | 7.092      | 7.09           | 7.058         | 7.126   |
| Aroclor 1260            | 3                     | 7.341  | 7.339    | 7.34                 | 7.34      | 7.34       | 7.3            | 4 7.306       | 7.374   |

### PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name                     | : Pace Analytic               | cal - Gree | en Bay                 | Instrume      | ent ID: 40               | GCSK      | _GC Co        | lumn: <u>(</u>       | Col 2 | _SDG No.:            | 4014  | 18598 |
|------------------------------|-------------------------------|------------|------------------------|---------------|--------------------------|-----------|---------------|----------------------|-------|----------------------|-------|-------|
| Calibration                  | Date(s):                      | 03/06/20   | 18                     | 03/06/2018    |                          | (         | Calibratio    | on Time              | e(s): | 11:50                |       | 19:23 |
| LAB FILE                     | ID                            |            |                        |               |                          |           |               |                      |       |                      |       |       |
| CAL1A = 030618.B\030618055.D |                               |            |                        | CAL1B =       | 030618.B                 | 030618019 | ).D           | CAL                  | 1C =  | 030618.B\03          | 06180 | 43.D  |
| CAL1D =                      | = <u>030618.B\030618031.D</u> |            |                        | CAL1F =       | 030618.B\03061           |           | 007.D CAL2A = |                      | 2A =  | 030618.B\03          | 06180 | 57.D  |
| CAL2B =                      | 2B = 030618.B\030618021.D     |            |                        | CAL2C =       | 030618.B                 | 030618045 | 5.D           | CAL                  | 2D =  | 030618.B\03          | 06180 | 33.D  |
| CAL2F =                      | AL2F = 030618.B\030618009.D   |            |                        | CAL3A =       | 030618.B\030618059.D     |           | ).D           | CAL3B =              |       | 030618.B\030618023.D |       | 23.D  |
| CAL3C = 030618.B\030618047.D |                               |            | _ CAL3D = <u>03061</u> |               | 80618.B\030618035.D CAL3 |           | 3F =          | 030618.B\030618011.D |       | 11.D                 |       |       |
| CAL4A =                      | 030618.B\030                  | 618061.D   |                        | CAL4B =       | 030618.B                 | 030618025 | 5.D           | CAL4                 | 4C =  | 030618.B\03          | 06180 | 49.D  |
| CAL4D =                      | 030618.B\030                  | 618037.D   |                        | CAL4F =       | 030618.B\                | 030618013 | 3.D           | CAL:                 | 5A =  | 030618.B\03          | 06180 | 63.D  |
| CAL5B =                      | 030618.B\030                  | 618027.D   |                        | CAL5C = 03061 |                          | 030618051 | .D            | <br>CAL              | 5D =  | 030618.B\03          | 06180 | 39.D  |
| CAL5F =                      | 030618.B\030                  | 618015.D   |                        |               |                          |           |               |                      |       |                      |       |       |
| 001                          | ADOLIND.                      | DEAL       | 0414                   | 0.01.0        | 0.41.6                   |           |               | 2015                 |       | RT                   | WIND  | OW    |
| CON                          | MPOUND                        | PEAK       | CAL1                   | CAL2          | CAL                      | B CAI     | -4 C          | CAL5                 | RT    | FROM                 | 1     | TO    |
| Aroclor 12                   | 60                            | 4          | 7.531                  | 7.531         | 7.531                    | 7.53      | 31 7          | .531                 | 7.53  | 1 7.497              | 7     | 7.565 |
| Aroclor 12                   | 60                            | 5          | 7.989                  | 7.989         | 7.988                    | 7.98      | 38 7          | .988                 | 7.98  | 8 7.954              | ı     | 8.022 |
| Decachlor                    | obiphenyl (S)                 |            | 8.66                   | 8.66          | 8.659                    | 8.66      | 31 8          | 8.66                 | 8.66  | 8.626                | 3     | 8.694 |
| Tetrachlor                   | o-m-xvlene                    |            | 2.551                  | 2 551         | 2 55                     | 2.55      | 51 2          | .551                 | 2.55  | 2.516                | 3     | 2.584 |

## PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION DATA (SINGLE POINT)

| Lab Name: Pac      | ce Analytical - Green Bay | Instrument ID: | 40GCSK | GC Column: C     | Col 2 | _SDG No.: | 40148598 |  |
|--------------------|---------------------------|----------------|--------|------------------|-------|-----------|----------|--|
| Calibration Date   | e(s):03/06/2018           |                |        | Calibration Time | (s):  | 11:34     |          |  |
| LAB FILE ID        |                           |                |        |                  |       |           |          |  |
| CAL3S = <u>030</u> | 0618.B\030618005.D        |                |        |                  |       |           |          |  |

| COMPOUND     | ARACHAIT | DEAK | DT    | RT WINDOW |       | RESPONSE   |   |
|--------------|----------|------|-------|-----------|-------|------------|---|
| COMPOUND     | AMOUNT   | PEAK | RT    | FROM      | TO    | FACTOR     |   |
| Aroclor 1232 | .5       | 1    | 2.924 | 2.89      | 2.958 | 2730104.00 | - |
| Aroclor 1232 | .5       | 2    | 3.595 | 3.562     | 3.63  | 1438576.00 |   |
| Aroclor 1232 | .5       | 3    | 3.91  | 3.876     | 3.944 | 4258826.00 |   |
| Aroclor 1232 | .5       | 4    | 4.013 | 3.979     | 4.047 | 1806102.00 |   |
| Aroclor 1232 | .5       | 5    | 4.08  | 4.046     | 4.114 | 1209090.00 |   |

|                  | Document Name:               | Document Revised:             |
|------------------|------------------------------|-------------------------------|
| Pace Analytical" | PCB Calibration Low Standard | 23-Apr-2018                   |
| doormarytroa     | Document No.:                | Issuing Authority:            |
|                  | F-GB-O-155-Rev.00            | Pace Green Bay Quality Office |

#### **PCB Low Level Calibration % Difference Check**

Lab Name: Pace Analytical - Green Bay
Instrument ID: 40GCSK
Calibration Date: 3/6/2018

|             |            | Abundance     |               | Acceptance |           |
|-------------|------------|---------------|---------------|------------|-----------|
| Aroclor     | True Value | Concentration | Difference %ر | Criteria % | Pass/Fail |
| AR1221-CAL1 | .1         | 0.112126      | 12.126        | 20         | Pass      |
| AR1242-CAL1 | .1         | 0.109171      | 9.171 🞝       | 20         | Pass      |
| AR1248-CAL1 | .1         | 0.106336      | 6.336         | 20         | Pass      |
| AR1254-CAL1 | .1         | 0.107422      | 7.422         | 20         | Pass      |
| AR1016-CAL1 | .1         | 0.107656      | 7.656         | 20         | Pass      |
| AR1260-CAL1 | .1         | 0,106711      | 6.711         | 20         | Pass      |



#### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

SAMPLE NO.

10758175ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: <u>03/06/2018</u> Time: <u>19:55</u>

Instrument ID: 40GCSK GC Column: Col 2 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 030618.B\030618067.D Init. Calib. Time(s): 11:34 19:23

SDG No.: 40148598

| COMPOUND               | PEAK | CURVE    | DT    | RT WI          | NDOW  | RRF or     | RRF or       | %D      |        |
|------------------------|------|----------|-------|----------------|-------|------------|--------------|---------|--------|
| COMPOUND               | PEAR | CURVE    | RT    | FROM TO Amount |       | Amount     | Amount       | %D      |        |
| Aroclor 1221           | 1    | Averaged | 1.855 | 1.819          | 1.887 | 994458.850 | 1028912.00   | 3.4645  | 7      |
| Aroclor 1221           | 2    | Averaged | 2.473 | 2.438          | 2.506 | 534918.350 | 534684.000   | -0.0438 | 7      |
| Aroclor 1221           | 3    | Averaged | 2.759 | 2.726          | 2.794 | 1407936.95 | 1424282.00 . | 1.1609  | 7      |
| Aroclor 1221           | 4    | Averaged | 2.862 | 2.828          | 2.896 | 1109285.60 | 1107376.00   | -0.1721 | 7      |
| Aroclor 1221           | 5    | Averaged | 2.925 | 2.892          | 2.96  | 3361301.80 | 3490914.00   | 3.8560  | $\neg$ |
| Decachlorobiphenyl (S) |      | Averaged | 8.659 | 8.626          | 8.694 | 128906408. | 128279220.   | -0.4865 |        |
| Tetrachloro-m-xylene   |      | Averaged | 2.551 | 2.516          | 2.584 | 118423432. | 114868540.   | -3.0018 |        |



### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

SAMPLE NO.

10758178ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 20:11

Instrument ID: 40GCSK GC Column: Col 2 Init. Calib. Date(s): 03/06/2018 03/06/2018

SDG No.: 40148598

| COMPOUND               | DEAK | CHDVE    | рт       | RT WI | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|----------|-------|-------|------------|------------|---------|---|
| COMPOUND               | PEAK | CURVE    | CURVE RT |       | ТО    | Amount     | Amount     | %D      |   |
| Aroclor 1242           | 1    | Averaged | 3.397    | 3.364 | 3.432 | 2535757.25 | 2523920.00 | -0.4668 |   |
| Aroclor 1242           | 2    | Averaged | 3.595    | 3.562 | 3.63  | 2567918.20 | 2578394.00 | 0.4079  | 4 |
| Aroclor 1242           | 3    | Averaged | 3.91     | 3.876 | 3.944 | 7622055.10 | 7476474.00 | -1.9100 | , |
| Aroclor 1242           | 4    | Averaged | 4.013    | 3.979 | 4.047 | 3224394.90 | 3221522.00 | -0.0891 | V |
| Aroclor 1242           | 5    | Averaged | 4.079    | 4.046 | 4.114 | 2170022.35 | 2161114.00 | -0.4105 | 2 |
| Decachlorobiphenyl (S) |      | Averaged | 8.66     | 8.626 | 8.694 | 128906408. | 121118560. | -6.0415 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.551    | 2.516 | 2.584 | 118423432. | 111520360. | -5.8291 | • |



#### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10758173ICV

03/06/2018

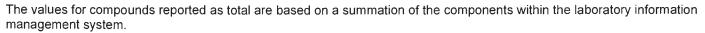
Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 20:27

Instrument ID: 40GCSK GC Column: Col 2 Init. Calib. Date(s): 03/06/2018

Lab File ID: 030618.B\030618071.D Init. Calib. Time(s): 11:34 19:23

SDG No.: 40148598

| COMPOUND               | PEAK | CURVE    | DT    | RT WI | NDOW  | RRF or     | RRF or     |   | %D      |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---|---------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | TO    | Amount     | Amount     |   | %D      |   |
| Aroclor 1248           | 1    | Averaged | 4.346 | 4.313 | 4.381 | 2483101.10 | 2471852.00 |   | -0.4530 | 7 |
| Aroclor 1248           | 2    | Averaged | 4.632 | 4.598 | 4.666 | 4455813.90 | 4407412.00 |   | -1.0863 | 4 |
| Aroclor 1248           | 3    | Averaged | 4.899 | 4.866 | 4.934 | 2151675.70 | 2224258.00 | 1 | 3.3733  | 7 |
| Aroclor 1248           | 4    | Averaged | 4.966 | 4.933 | 5.001 | 5639947.95 | 5657272.00 |   | 0.3072  |   |
| Aroclor 1248           | 5    | Averaged | 5.125 | 5.093 | 5.161 | 3941717.85 | 4067778.00 |   | 3.1981  | 4 |
| Decachlorobiphenyl (S) |      | Averaged | 8.66  | 8.626 | 8.694 | 128906408. | 120922260. |   | -6.1938 | 7 |
| Tetrachloro-m-xylene   |      | Averaged | 2.551 | 2.516 | 2.584 | 118423432. | 112456780. |   | -5.0384 |   |



#### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10758177ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 20:44

 Instrument ID:
 40GCSK
 GC Column:
 Col 2
 Init. Calib. Date(s):
 03/06/2018
 03/06/2018

Lab File ID: 030618.B\030618073.D Init. Calib. Time(s): 11:34 19:23

SDG No.: 40148598

| COMPOUND               | DEAK | CURVE RT |       | RT WI | NDOW  | RRF or     | RRF or     | %D       |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|----------|---|
| COMPOUND               | PEAK |          |       | FROM  | ТО    | Amount     | Amount     | 70D      |   |
| Aroclor 1254           | 1    | Averaged | 5.249 | 5.215 | 5.283 | 5685404.75 | 5161976.00 | -9.2065  |   |
| Aroclor 1254           | 2    | Averaged | 5.495 | 5.462 | 5.53  | 4703045.05 | 4301472.00 | -8.5386  |   |
| Aroclor 1254           | 3    | Averaged | 5.598 | 5.564 | 5.632 | 8618632.15 | 7592956.00 | -11.9007 | _ |
| Aroclor 1254           | 4    | Averaged | 6.116 | 6.083 | 6.151 | 5370488.20 | 4864896.00 | -9.4143  | / |
| Aroclor 1254           | 5    | Averaged | 6.388 | 6.354 | 6.422 | 7351311.20 | 6941146.00 | -5.5795  |   |
| Decachlorobiphenyl (S) |      | Averaged | 8.659 | 8.626 | 8.694 | 128906408. | 122186780. | -5.2128  |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.55  | 2.516 | 2.584 | 118423432. | 111665040. | -5.7070  |   |



The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

219 of 414

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

SAMPLE NO.

10758166ICV

03/06/2018

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 21:00

Instrument ID: 40GCSK GC Column: Col 2 Init. Calib. Date(s): 03/06/2018

 Lab File ID:
 030618.B\030618075.D
 Init. Calib. Time(s):
 11:34
 19:23

SDG No.: 40148598

| COMPOUND               | PEAK | CURVE    | рт    | RT WII | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|--------|-------|------------|------------|---------|---|
| COMPOUND               | FEAR | CURVE    | RT    | FROM   | TO    | Amount     | Amount     | /00     |   |
| Aroclor 1016           | 1    | Averaged | 3.396 | 3.363  | 3.431 | 3044196.10 | 3091966.00 | 1.5692  |   |
| Aroclor 1016           | 2    | Averaged | 3.595 | 3.561  | 3.629 | 3105369.95 | 3146306.00 | 1.3182  |   |
| Aroclor 1016           | 3    | Averaged | 3.91  | 3.876  | 3.944 | 9315861.95 | 9332072.00 | 0.1740  | ٦ |
| Aroclor 1016           | 4    | Averaged | 4.013 | 3.979  | 4.047 | 3947962.25 | 3961404.00 | 0.3405  |   |
| Aroclor 1016           | 5    | Averaged | 4.079 | 4.045  | 4.113 | 2647543.25 | 2657106.00 | 0.3612  | ٦ |
| Aroclor 1260           | 1    | Averaged | 6.388 | 6.354  | 6.422 | 9796686.30 | 9179102.00 | -6.3040 | J |
| Aroclor 1260           | 2    | Averaged | 7.092 | 7.058  | 7.126 | 11489000.4 | 11680202.0 | 1.6642  |   |
| Aroclor 1260           | 3    | Averaged | 7.34  | 7.306  | 7.374 | 5540976.85 | 5535608.00 | -0.0969 | U |
| Aroclor 1260           | 4    | Averaged | 7.53  | 7.497  | 7.565 | 3371783.05 | 3365166.00 | -0.1962 | 7 |
| Aroclor 1260           | 5    | Averaged | 7.989 | 7.954  | 8.022 | 3099916.60 | 3290370.00 | 6.1438  | ┐ |
| Decachlorobiphenyl (S) |      | Averaged | 8.659 | 8.626  | 8.694 | 128906408. | 122313980. | -5.1141 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.551 | 2.516  | 2.584 | 118423432. | 112212640. | -5.2446 |   |



### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10764627CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/07/2018 Time: 13:58

 Instrument ID:
 40GCSK
 GC Column:
 Col 2
 Init. Calib. Date(s):
 03/06/2018
 03/06/2018

Lab File ID: 030718.B\030718007.D Init. Calib. Time(s): 11:34 19:23

SDG No.: 40148598

| 00110011110            |      |          |       | RT WII | NDOW  | RRF or     | RRF or     |         |   |
|------------------------|------|----------|-------|--------|-------|------------|------------|---------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM   | ТО    | Amount     | Amount     | %D      |   |
| Aroclor 1221           | 1    | Averaged | 1.854 | 1.819  | 1.887 | 994458.850 | 944298.000 | -5.0440 | 7 |
| Aroclor 1221           | 2    | Averaged | 2.472 | 2.438  | 2.506 | 534918.350 | 506086.000 | -5.3900 | 4 |
| Aroclor 1221           | 3    | Averaged | 2.76  | 2.726  | 2.794 | 1407936.95 | 1343000.00 | -4.6122 | 7 |
| Aroclor 1221           | 4    | Averaged | 2.862 | 2.828  | 2.896 | 1109285.60 | 1048510.00 | -5.4788 | V |
| Aroclor 1221           | 5    | Averaged | 2.925 | 2.892  | 2.96  | 3361301.80 | 3267952.00 | -2.7772 | • |
| Decachlorobiphenyl (S) |      | Averaged | 8.659 | 8.626  | 8.694 | 128906408. | 122121880. | -5.2631 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.551 | 2.516  | 2.584 | 118423432. | 114367240. | -3.4252 |   |



#### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10764628CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/07/2018 Time: 17:11

Instrument ID: 40GCSK GC Column: Col 2 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 030718.B\030718031.D Init. Calib. Time(s): 11:34 19:23

SDG No.: 40148598

| COMPOUND               | PEAK | CHDVE    | DT    | RT WI   | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|---------|-------|------------|------------|---------|---|
| COMPOUND               | PEAR | CURVE RT |       | FROM TO |       | Amount     | Amount     | /00     |   |
| Aroclor 1232           | 1    | Averaged | 2.924 | 2.89    | 2.958 | 2730104.00 | 2733048.00 | 0.1078  | 1 |
| Aroclor 1232           | 2    | Averaged | 3.594 | 3.562   | 3.63  | 1438576.00 | 1428412.00 | -0.7065 | 1 |
| Aroclor 1232           | 3    | Averaged | 3.91  | 3.876   | 3.944 | 4258826.00 | 4208026.00 | -1.1928 | 1 |
| Aroclor 1232           | 4    | Averaged | 4.013 | 3.979   | 4.047 | 1806102.00 | 1793104.00 | -0.7197 |   |
| Aroclor 1232           | 5    | Averaged | 4.078 | 4.046   | 4.114 | 1209090.00 | 1184526.00 | -2.0316 | _ |
| Decachlorobiphenyl (S) |      | Averaged | 8.659 | 8.626   | 8.694 | 128906408. | 124486740  | -3.4286 | 1 |
| Tetrachloro-m-xylene   |      | Averaged | 2.55  | 2.516   | 2.584 | 118423432. | 117398500. | -0.8655 |   |



| Prep Method      | EPA 3541         |
|------------------|------------------|
| Spiked By        | AMC              |
| Instrument       | 40BALL           |
| Hexane           | 188917           |
| H2SO4 - Conc.    | 179361           |
| Reviewed By Date | 03/28/2018 16:09 |

| Analysis Method             | EPA 8082A Mod           |  |
|-----------------------------|-------------------------|--|
| Spiked By Date/Time         | 03/02/2018 06:50:12:008 |  |
| Conc. Temp #1               | 40                      |  |
| Sodium Sulfate              | 186889                  |  |
| Acid 3665A<br>Date/Initials | 3/5/18 AMC              |  |
| Batch Notes                 | Hex/Ace 50:50-190415    |  |

| Template Vers | sion: F-GB-O-113- | Rev.03 (19Feb2018)          |
|---------------|-------------------|-----------------------------|
| Extracted By  | AMC               | Extracted Date/7            |
| Witnessed By  | BLM               | Witnessed By (<br>Date/Time |
| Conc. Temp #2 | 40                | Methylene Chlor             |
| Florisil      | 186910            | 3620B Date/Initia           |
| Tuna          | None Added        | Reviewed By                 |
| 71,571,571    |                   |                             |

| Extracted Date/Time    | 03/02/2018 06:50:10:904 |
|------------------------|-------------------------|
| Witnessed By Date/Time | 03/02/2018 06:50:12:608 |
| Methylene Chloride     | None Added              |
| 3620B Date/Initials    | 3/5/18 AMC              |
| Reviewed By            | CAH                     |
|                        |                         |

Sample Information:

40148598\_Rev2

| Cumple ime |             |               | -                  |                      |                          |              |                 | l i i i i i i i i i i i i i i i i i i i |
|------------|-------------|---------------|--------------------|----------------------|--------------------------|--------------|-----------------|---|
| QC Rule    | Sample Type | Lab Sample ID | Initial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)    | AR1242-SPK<br>(mL)                      |
| 8082A TNYP | BLANK       | 1653810       | 10                 | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | LCS         | 1653811       | 10                 | 5                    | 3                        |              | 189973<br>(.25) | 182336<br>(.125)                        |
| 8082A TNYP | PS          | 40148598001   | 10.0375            | 5                    | 3                        |              | 189973<br>(.25) | (.120)                                  |
| 8082A TNYP | PS          | 40148598002   | 9.9964             | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | PS          | 40148598003   | 10.0303            | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | PS          | 40148598004   | 10.0362            | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | RQS         | 40148598005   | 10.0161            | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | MS          | 1653812       | 9.9892             | 5                    | 3                        |              | 189973<br>(.25) | 182336<br>(.125)                        |
| 8082A TNYP | DUP         | 1653813       | 9.9969             | 5                    | 3                        |              | 189973<br>(.25) | (.120)                                  |
| 8082A TNYP | PS          | 40148671001   | 10.0022            | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | PS          | 40148671002   | 9.9993             | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | PS          | 40148671003   | 10.0038            | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | RQS         | 40148671004   | 9.9888             | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | DUP         | 1653814       | 9.9904             | 5                    | 3                        |              | 189973<br>(.25) |   |
| B082A TNYP | PS          | 40148671005   | 10.0329            | 5                    | 3                        |              | 189973<br>(.25) |   |
| 8082A TNYP | PS          | 40148671006   | 9.995              | 5                    | 3                        |              | 189973<br>(.25) |   |

# Prace Analytical Prep Log Report

| 40148598_F | QC Rufe                         | Sample Type | Lab Sample ID | Initial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes                            | 8081-SS (ML) <sup>††</sup>              | AR1242-SPK<br>(mL) |
|------------|---------------------------------|-------------|---------------|--------------------|----------------------|--------------------------|---|---|--------------------|
| Rev2       | 8082A TNYP                      | PS          | 40148722001   | 9.9867             | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
|            | 8082A TNYP                      | PS          | 40148722002   | 9.9641             | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
|            | 8082A TNYP                      | PS          | 40148722003   | 9.9603             | 5                    | 3                        | , | 189973<br>(.25)                         |                    |
|            | 8082A TNYP                      | PS          | 40148722004   | 9.9858             | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
|            | 8082A TNYP                      | PS          | 40148722005   | 9.96               | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
|            | 8082A TNYP                      | PS          | 40148722006   | 10.0363            | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
|            | 8082A TNYP                      | PS          | 40148722007   | 10.0057            | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
| 2          | 8082A TNYP                      | PS          | 40148722008   | 9.9787             | 5                    | 3                        |   | 189973<br>(.25)                         |                    |
| 295 of 414 | Standard No<br>182336: Ar1242 S |             | /mL 40GCS9.   | 18997              | 3: Pest/PCB Su       | rrogate Spike 4          | ogcsc.                                  | , |                    |

|              |   |  | **************************************   |
|--------------|---|--|--|
|              | Sequence Name: C:\  | msdchem\1\sequence\030618.s                      |  |
|              | Comment:<br>Operator: BLM                                 | -  |  |
|              | Data Path: C:\  | MSDCHEM\1\DATA\030618\                           |  |
|              | Instrument Control P Data Analysis P                      | re-Seq Cmd:<br>re-Seq Cmd:                       |  |
|              | * * *   | · ·  |  |
|              | Instrument Control Po<br>Data Analysis Po                 | st-Seq Cmd:<br>st-Seq Cmd:                       |  |
|              |   |  |  |
|              | Method Sections T<br>(X) Full Method                      | (X) On Mismatch, Inject Anyway                   |  |
|              | ( ) Reprocessing  |  |  |
|              | the same one case and case are same one case and case are |  |  |
|              | Line 1) Unlinked  | Sample Name/Misc Info                            |  |
|              |   | prime  |  |
|              | Datafile<br>Method  | 030618001<br>GEBIOTA2017                         |  |
| <b></b>      | 3) Sample 2   | prime  |  |
|              | Datafile<br>Method  | 030618002<br>GEBIOTA2017                         |  |
|              | 4) RearSamp 3   | HEXANE   |  |
|              | Datafile<br>Method  | 030618003<br>GEBIOTA2017                         |  |
|              | 5) Sample 4   | HEXANE   |  |
|              | Datafile<br>Method  | 030618004<br>GEBIOTA2017                         | Land of the land o |
|              |   | 1232-CAL35,185539:1,17499,NSA<br>030618005       |  |
|              | Method  | GEBIOTA2017                                      |  |
| C .          | 7) Sample 4 Datafile                                      | HEXANE<br>030618006                              |  |
|              | Method  | GEBIOTA2017                                      |  |
|              | 8) RearSamp 6<br>Datafile                                 | 1221-CAL1F,188138:1,17499,NSA<br>030618007       |  |
|              | Method  | GEBIOTA2017                                      |  |
|              | 9) Sample 5 Datafile                                      | 1232-CAL3S,185539:1,17498,NSA<br>030618008       |  |
| <del></del>  | Method  | GEBIOTA2017<br>1221-CAL2F, 188139:1, 17499, NSA  |  |
|              | 10) RearSamp 7 Datafile                                   | 030618009  |  |
|              | Method<br>11) Sample 6                                    | GEBIOTA2017<br>1221-CALIF,188138:1,17498,NSA     |  |
| <del> </del> | Datafile  | 030618010  |  |
|              | Method<br>12) RearSamp 8                                  | GEBIOTA2017<br>1221-CAL3F, 185538: 1, 17499, NSA |  |
|              | Datafile  | 030618011  |  |
|              | Method<br>13) Sample 7                                    | GEBIOTA2017<br>1221-CAL2F,188139:1,17498,NSA     |  |
|              | Datafile  | 030618012<br>CERTOTA 2017                        |  |
|              | Method<br>14) RearSamp 9                                  | GEBIOTA2017<br>1221-CAL4F,188140:1,17499,NSA     |  |
|              | Datafile<br>Method  | 030618013<br>GEBIOTA2017                         |  |
|              | 15) Sample 8  | 1221-CAL3F, 185538: 1, 17498, NSA                |  |
|              | Datafile<br>Method  | 030618014<br>GEBIOTA2017                         |  |
|              | 16) RearSamp 10   | 1221-CAL5F, 188141:1, 17499, NSA                 |  |
| <del></del>  | Datafile<br>Method  | 030618015<br>GEBIOTA2017                         |  |
|              | 17) Sample 9  | 1221-CAL4F,188140:1,17498,NSA<br>030618016       |  |
|              | Datafile<br>Method  | GEBIOTA2017                                      |  |
|              | 18) RearSamp 11 Datafile                                  | HEXANE<br>030618017                              |  |
|              | Method  | GEBIOTA2017                                      |  |
|              | 19) Sample 10<br>Datafile                                 | 1221-CAL5F, 188141:1, 17498, NSA<br>030618018    | aministra de la companya del companya de la companya del companya de la companya  |
|              | Method  | GEBIOTA2017                                      |  |
|              | 20) RearSamp 12   | 1242-CALIB, 188132:1, 17499, NSA                 |  |
|              | Dast Modified: Tue  | Mar 06 10:58:59 2018 Page: 1                     |  |
|              |   | 1   1   1   1   1   BHM   317/18                 |  |
|              |   | Continued on Page                                |  |
|              |   | Continued on Fage                                | 5  |
|              |   | Read and Understood By                           |  |
|              | _ 1 1   |  | / .a   |
| B            | Day 1   | 3/7/18   | 12/8   |
| 1            | Spined  | Date Signed                                      | Date   |
|              |   |  |  |

|  |             |         |     | - Constitution of the Cons |               | *************************************** |     | -  |                      | 2            | T       | T                                   |         |            |          |         | -   |     |       | Assessed |        |  |     |  |          |
|--|-------------|---------|-----|--|---------------|---|-----|--|----------------------|--------------|---------|-------------------------------------|---------|------------|----------|---------|-----|-----|-------|----------|--------|--|-----|--|----------|
| -  | -           |         |     |  | afil          | e <sup>:</sup>                          |     |  | 6180                 |              |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             | <u></u> | 21) | Met  | hod           |   | 11  |  | IOTA<br>ANE          | 12017        |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
| 1  |             |         | 21, |  | afil          | e                                       | 11  |  | 6180                 | 020          |         |                                     |         |            | 39       |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 223 | Met<br>Rear  | hod           |   | 13  |  |                      | 12017        |         | 543:1                               | 1,1749  | 9.NS       | А        |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 221 |  | afil          |   | 13  | 030  | 6180                 | 21           |         | ,,,,,,                              | ., 2    | , , , ,    |          |         |     |     |       |          |        |  |     |  | <u> </u> |
| e de la constante de la consta |             |         | 221 |  | hod           |   | 12  |  |                      | 12017        |         | 32.1                                | 1,1749  | 8. NS      | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 23) | Samp   | afil          | e                                       | 1/2 |  | 6180                 |              | 1.0.0.1 | د ندید.                             | 172132  | 0,110      |          | *       |     |     |       |          |        | *****                                  |     |  |          |
| **************************************   |             |         |     | Met  | hod           |   |     |  |                      | 2017         |         |                                     | 1740    | o Ne       | n        |         |     |     |       |          |        | -                                      |     |  |          |
|  | -           |         | 24) | Rear   | Samp          |   | 14  |  | 6180                 |              | 1 8 3 3 | 94.4/3.1                            | 1749    | 3. , iy 3. | _        |         |     |     |       |          |        |  |     |  |          |
|  |             | -       |     | Met  | hod           |   |     | GEB  | IOTA                 | 2017         | 1055    | 40.4                                | 1740    | 0 110      | 75       |         |     |     |       |          |        |  |     | na di Salam |          |
| ***************************************  |             |         | 25) | Samp   | le<br>afil    | ٥                                       | 13  |  | 6180                 |              | 1822    | 143:3                               | 1749    | 0,145      | ~        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Met  | hod           | <del>"</del>                            |     | GEB  | IOTA                 | 12017        |         |                                     | -340    | 0 110      |          |         |     |     |       |          |        |  |     |  |          |
|  |             | _       | 26) | Rear   | Samp          | Θ.                                      | 15  |  | 2-CF                 |              | 1855    | 45:1                                | 1,1749  | 9, NS      | ev.      |         |     |     |       |          |        |  |     |  |          |
| ***********  |             |         |     |  | hod           |   |     | GEB  | IOTA                 | 2017         |         |                                     |         |            | _        |         |     |     |       |          |        |  |     |  |          |
|  |             | -       | 27) | Samp   | le<br>afil    | a .                                     | 14  |  | 2-CF                 |              | 1,855   | 44:1                                | ,1749   | e, NS      | Ą        |         |     |     |       |          |        |  | 1   |  |          |
|  |             |         |     | Met  |               | _                                       |     | GEB  | IOTA                 | 2017         |         |                                     |         |            | _        |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 28) | Rear   | Samp<br>afil  | _                                       | 16  |  | 2-CA                 |              | 1855    | 46:1                                | 1749    | 9, NS      | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Met  |               | e <sub>i</sub>                          |     | GEB  | IOTA                 | 2017         |         |                                     |         | 02.        | _        |         |     |     |       |          |        | 4.23                                   |     |  |          |
|  |             |         | 29) | Samp   |               |   | 15  |  | 2-CA                 |              | 1855    | 45:1                                | ,1749   | 8,NS       | A.       |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Met  | afil:<br>hod  | е                                       |     |  |                      | 2017         |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
| -  |             |         | 30) | Rear   |               | _                                       | 17  |  | ANE<br>6180          | 120          |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Met  | afil<br>hod   | e.                                      |     | GEB  | IOTA                 | 2017         |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  | 8000        |         | 31) | Samp   |               | _                                       | 16  |  | 2-CF                 |              | 1855    | 46:1                                | ,1749   | 8 , NS     | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Met  | afil<br>hod   | е                                       |     | GEB  | IOTA                 | 2017         |         |                                     |         |            |          |         |     |     |       |          |        | `,                                     |     |  |          |
|  |             |         | 32) | Rear   | Samp          |   | 18  |  |                      |              | 1881    | 34:1                                | ,1749   | 9, NS      | A        |         |     |     |       |          |        |  |     |  |          |
|  | - Comment   |         |     | Met  | afil<br>hod   | е                                       |     |  | 6180                 | 2017         |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  | -           |         | 33) | Samp   | le            |   | 17  | HEX  |                      |              |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat<br>Met   | afil:<br>hod  | e                                       |     | GEB  | 6180<br>10TA         | 2017         |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 34) | Rear   | Samp          |   | 19  |  |                      |              | 1855    | 48:1                                | 1749    | 9, NS      | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat<br>Met   | afil<br>hod   | 2                                       |     | GEB  | 6180                 | 2017         |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
| -  | -           |         | 35) | Samp   | 1.e           |   | 18  |  |                      |              | 1881    | 34:1                                | ,1749   | 8,NS       | A.       |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat  | afil<br>hod   | 9                                       |     |  | 6180                 | 12017        |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  | 1        |
|  |             |         | 36) | Rear   | Samp          |   | 20  | 124  | 8-CA                 | L3D,         |         | 49:1                                | ,1749   | 9, NS      | A.       |         |     |     |       |          |        | ,                                      |     |  |          |
| ***************************************  |             |         |     | Dat<br>Met   | afil:<br>hod  | e                                       |     |  | 618C                 | )35<br>(2017 |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 37) | Samp   | le            |   | 19  | 124  | 8-CF                 | L2D,         |         | 48:1                                | ,1749   | 8,NS       | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat  | afil<br>bod   | e                                       |     |  | 6180                 | )36<br>(2017 |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
| 88,100,000,000   |             |         | 38) | Rear   | Samp          |   | 21  | 124  | 8-CF                 | L4D,         | 1855    | 50:1                                | 1749    | 9, NS      | A.       |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat  | afil<br>hod   | e                                       |     |  | 6180                 | 137<br>12017 |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 39) | Samp   | le            |   | 20  | 124  | 8-CA                 | L3D,         |         | 49:1                                | ,1749   | 8,NS       | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat<br>Met   | afil<br>hod   | e:                                      |     | GEB  | 6180                 | 2017         |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 40) | Rear   | Samp          |   | 2.2 | 124  | 8-CA                 | L5D,         | 1855    | 51:1                                | ,1749   | 9, NS      | A        |         |     |     |       |          |        |  |     |  |          |
|  |             | *****   |     | Dat<br>Met   | afil<br>hod   | ę                                       |     | GEB  | 6180<br>10T#         | 2017         |         |                                     |         |            |          |         |     |     |       |          |        | ,                                      |     |  | -        |
| -  |             |         | 41) | Samp   | l.e           |   | 21  | 124  | 8-CF                 | L4D,         | 1855    | 50:1                                | ,1749   | 8, NS      | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat  | afil<br>hod   | 8                                       |     |  | 6180<br>IOTA         | 040<br>12017 |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
|  |             |         | 42) | Rear   | Samp          | _                                       | 23  | HEX  | ANE                  |              |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
| Allanan  |             |         |     | Dat<br>Met   | afil:<br>hod  | e                                       |     | GEB  | 6180                 | 2017         |         |                                     |         |            | •        |         |     |     |       |          |        |  |     |  |          |
|  |             | ******  | 43) | Samp   | 1 e           | _                                       | 22  | 124  | 8-CA                 | L5D.         | 1855    | 51:1                                | ,1749   | 8,NS       | A        |         |     |     |       |          |        |  |     |  |          |
|  |             |         |     | Dat  | afil<br>hod   | e                                       |     |  | 6180<br>IOT <i>P</i> | 12017        |         |                                     |         |            |          |         |     |     |       |          |        |  |     |  |          |
| ***************************************  |             |         |     |  |               |   |     |  |                      |              |         |                                     |         |            |          |         |     |     |       |          |        | -                                      |     |  |          |
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|   |  |   | 44)        | RearSamp<br>Datafile | 2.4   | 4-CALIC, 188135:1, 17499, 618043      | ,                 |  |              |  |
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|   |  |   | 41)        | Sample<br>Datafile   | 24    | 618046                                | NON               |  |              |  |
|   |  | -   | 463        | Method               | 26    | IOTA2017<br>4-CAL3C,185554:1,17499,   | NSA.              | -  | -            | <del> </del>   |
|   |  |   | 400        | RearSamp<br>Datafile | 20    | 618047                                |                   |  |              |  |
|   |  |   | 461        | Method<br>Sample     | 25    | IOTA2017<br>4-CAL2C,185553:1,17498,   | NSA               |  |              |  |
| $\vdash$                                |  | -   | 4.9.)      | Datafile             | 23    | 618048                                |                   |  |              | -  |
|   |  |   | 501        | Method<br>RearSamp   | 27    | IOTA2017<br>4-CAL4C,185555-1,17499,   | NSA               |  |              |  |
|   |  |   | 507        | RearSamp<br>Datafile | 2 1   | 618049                                |                   |  |              |  |
|   |  |   | 511        | Method<br>Sample     | 26    | IOTA2017<br>4-CAE3C, 185554:1, 17498, | NSA               |  | <u> </u>     |  |
|   |  |   | ز بد د     | Datafile             | a U   | 618050                                |                   |  |              |  |
|   |  |   | 521        | Method<br>RearSamp   | 28    | IOTA2017<br>4-CALSC, 185556:1, 17499, | NSA               |  |              |  |
| $\vdash$                                |  |   | 52.1       | Datafile             | - 4   | 618051                                |                   | -  | -            |  |
|   |  |   | 53)        | Method<br>Sample     | 27    | IOTA2017<br>4-CAL4C,185555:1,17498,   | NSA               |  |              |  |
|   |  |   | 9,9,7      | Datafile             |       | 618052                                |                   | . The state of the |              |  |
|   |  |   | 541        | Method<br>RearSamp   | 29    | IOTA2017<br>ANE                       |                   |  |              |  |
|   |  |   |            | Datafile             |       | 618053                                |                   |  |              |  |
|   |  |   | 55)        | Method<br>Sample     | 28    | IOTA2017<br>4-CALSC,185556:1,17498,   | , ,               |  |              |  |
|   | -  |   |            | Datafile             |       | 618054                                |                   |  |              |  |
|   |  |   | 56)        | Method<br>RearSamp   | 30    | IOTA2017<br>0-CAL1A,188136:1,17499,.  | AR1               |  |              |  |
|   | on and the same of |   |            | Datafile             |       | 618055<br>IOTA2017                    |                   | plotechase   |              |  |
|   |  |   | 57)        | Method<br>Sample     | 29    |                                       |                   | -  |              |  |
|   |  |   |            | Datafile<br>Method   |       | 618056<br>IOTA2017                    |                   |  |              |  |
| 1                                       |  |   | 58)        | RearSamp             | 31    | 0-CAL2A, 185558:1, 17499,             | AR1               |  |              |  |
|   |  |   |            | Datafile<br>Method   |       | 618057<br>IOTA2017                    |                   | -  |              |  |
|   |  |   | 590        | Sample               | 30    | 0-CAL1A, 188136:1, 17498,             | AR1               |  |              |  |
|   | ***************************************  |   |            | Datafile<br>Method   |       | 618058<br>IOTA2017                    |                   |  |              |  |
|   |  |   | 60)        | RearSamp             | 32    | 0-CAL3A, 185559:1, 17499.             | AR1               | +  |              |  |
|   |  |   |            | Datafile<br>Method   |       | 618059<br>IOTA2017                    |                   | 4  |              |  |
| No.                                     |  |   | 61)        | Sample               | 3,1   | 0-CAL2A, 185558:1,17498,              | AR1               |  | 1            |  |
|   |  |   |            | Datafile<br>Method   |       | 618060<br>IOTA2017                    |                   | 1  |              |  |
|   | -  |   | 62)        | RearSamp             | 33    | 0-CAL4A, 185560: 1, 17499,            | AR1               | -  |              |  |
| disconnection                           | Bookkousea   |   |            | Datafile<br>Method   |       | 618061<br>IOTA2017                    |                   |  |              |  |
|   |  |   | 63)        | Sample<br>Datafile   | 32    | 0-CAL3A,185559:1,17498,.<br>618062    | AR1               | ***  |              |  |
|   |  |   |            | Method               |       | IOTA2017                              | 273               | -  |              |  |
|   |  |   | 64)        | RearSamp<br>Datafile | 34    | 0-CAL5A,185561:1,17499,,<br>618063    | AK1               |  |              |  |
|   |  |   |            | Method               | ~ ~   | IOTA2017                              | Ap.1              |  |              |  |
|   |  |   | 65)        | Sample<br>Datafile   | 33    | 0-CAL4A,185560:1,17498,.<br>618064    | WEI               | +  |              | -  |
| MARK unturbition                        |  |   |            | Method               | 20    | IOTA2017                              |                   |  | -            |  |
| *************************************** |  |   | 66)        | RearSamp<br>Datafile | 35    | ANE<br>618065                         |                   |  |              |  |
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|                     |          | ł            | 67            | ) s              |            |               |           | 34    |   |                | IOTA2          |            | 1855   | 61:1   | 1.17      | 498                                     | .ARI   | ı    |    |             |     |       |        |          |  |                 |  |             |
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|                     |          |              | 6.9           | ) S              |            |               |           | 3.5   |   | HEX.           |                |            |  |        |           |   |        |      |    |             |     |       |        |          |  |                 |  |             |
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|                     |          |              | 70            |                  |            | Samp          |           | 37    |   |                | 2-ICV          |            | 562  | 1,1    | 749       | 9, AF                                   | 124    | OV   |    |             |     |       |        | - 1      |  |                 |  |             |
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|                     |          |              | 70            | ) S              |            | hod           |           | 36    |   |                | IOTA2<br>1-ICV |            | 142  | 1.1    | 749       | a Ar                                    | 1122   | OK   |    |             |     |       |        |          |  |                 |  |             |
|                     |          |              |               |                  |            | afile         | ê         |       |   |                | 61807          |            |  |        | , 45      | 0,134                                   | ,      |      |    |             |     |       |        | Ī        |  |                 |  |             |
|                     |          | ļ            |               |                  |            | hod           |           |       |   |                | IOTA2          |            | لماماات  |        |           |   |        |      |    |             |     |       |        | 1        |  |                 |  |             |
| 1                   |          |              | 12            |                  |            | Samp<br>afile | <b>a</b>  | 36    |   |                | 8-ICV<br>61807 |            | 563:   | 1,1    | 749       | 9, AF                                   | (124   | OV   |    |             |     |       |        |          |  |                 |  |             |
| -                   | -        | -            | -             | Į.               | det        | hod           |           |       |   |                | IOTA2          |            |  |        |           |   |        |      |    |             |     |       |        | 1        |  |                 |  |             |
|                     |          |              | 73            | ). Sa            |            |               | _         | 37    |   |                | 2-ICV          |            | 562:   | 1,1    | 749       | B,AF                                    | 124    | or   |    |             |     |       |        |          |  |                 |  |             |
|                     |          |              |               |                  |            | afile<br>hod  | ₽         |       |   |                | 61807<br>IOTA2 |            |  |        |           |   |        |      |    |             |     |       |        | Ť        |  |                 |  |             |
|                     | <u> </u> | ļ            | 74            |                  |            | Samp          |           | 39    |   |                | 4-ICV          |            | 564:   | 1,1    | 749       | A, AR                                   | 125    | OV   |    |             |     |       |        | 1        |  |                 |  |             |
| 1                   |          |              |               |                  |            | afile         | 3         |       |   |                | 51807          |            |  |        |           |   |        |      |    |             |     |       |        |          | 1  |                 | . 1  |             |
| -                   |          |              | 75            | n<br>Sā          |            | hod<br>1 e    |           | 38    |   |                | OTA2           |            | 563.   | 1.3    | 7495      | A A B                                   | 124    | m i  |    |             |     |       |        | +        |  |                 |  | *********** |
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|                     |          |              | 76            |                  |            | Samp<br>afile |           | 40    |   |                | 0-ICV          |            | 565:   | 1,1    | 7499      | AR, ER                                  | 166    | OL   |    |             |     |       |        | 1        |  | · ·             |  |             |
|                     |          |              | •             |                  |            | hod           |           |       |   |                | COTAZ          |            |  |        |           |   |        |      |    |             |     |       |        | T        |  |                 |  |             |
|                     |          |              | 77)           | ) Sa             |            |               |           | 39    |   |                | -ICV           |            | 564:   | 1,1    | 7498      | AR                                      | 125    | OK   |    |             |     |       |        | 1        |  |                 |  |             |
|                     |          |              |               |                  |            | afíle<br>hod  |           |       |   |                | 51807          |            |  |        |           |   |        |      |    |             |     |       |        | ***      |  | THEOLING IS     | and the same of th |             |
| -                   |          |              | 78)           |                  |            | Samp          |           | 41    |   |                | OTA2           |            | 8138   | 3.10.  | 1749      | 9. R                                    | 1.12   | O.L  |    |             |     |       |        | +        |  |                 |  |             |
|                     |          |              | ,             |                  |            | afile         | ž.        | 1.    |   |                | 1807           |            | 010.0  | ,      |           | ,,,,,                                   |        |      |    |             |     |       |        | 9        |  |                 |  |             |
|                     |          | 1            |               |                  | leti       |               |           |       |   |                | OTA2           |            |  |        |           |   |        | 9 •  |    |             |     |       |        | t        |  |                 |  |             |
|                     |          |              | 7.9.)         | Sa               |            | le<br>sfile   |           | 40    |   |                | 0-ICV          |            | 5.65:  | 1,1    | 7498      | ; AR                                    | 166    | O.C. |    |             |     |       |        |          |  |                 | 1  |             |
|                     |          |              |               |                  | let)       |               | ,         |       |   |                | OTA2           |            |  |        |           |   |        |      |    |             |     |       |        | T        |  |                 |  |             |
|                     | _ `_     |              | 80)           |                  |            | Samp          |           | 42    | 1 | 242            | -CRDI          | L, 18      | 8132   | :1,    | 1749      | 9,R                                     | L12    | or   |    |             |     |       |        | L        |  |                 |  |             |
|                     |          |              |               |                  |            | ifile         |           |       |   |                | 18079          |            |  |        |           |   |        |      |    |             |     |       |        |          | -  | -               | 1  | 1           |
| $\vdash$            |          |              | 81)           | Sa               |            |               |           | 41    |   |                | OTA2           |            | 8138   | :1.    | 1749      | 8. R                                    | L12    | ov.  |    |             |     |       |        | -        |  |                 |  |             |
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|                     |          |              | 82)           |                  |            | Samp<br>file  |           | 43    |   |                | -CRDI          |            | 8134   | :1,.   | 1.7.4.9   | 9, R                                    | L12    | O.C. |    |             |     |       |        | 1        |  |                 |  |             |
|                     |          |              | •             |                  | et!        |               |           |       |   |                | OTA2           |            |  |        |           |   |        |      |    |             |     |       |        | T        |  |                 |  |             |
|                     |          |              | 83)           | Sa               |            |               |           | 42    |   |                | -CRDI          |            | 8132   | :1,    | 1749      | 8,R                                     | L12    | OK   |    |             |     |       |        | _        |  |                 |  |             |
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| $\vdash \vdash$     |          | $\sqcup$     | 86)           |                  |            | amp           |           | 45    |   |                | -CRDI          |            | 3136   | : 1, 7 | 749       | 9, R                                    | L16    | OVL  |    |             |     |       |        | -        | _  |                 |  |             |
|                     |          |              |               |                  | ata<br>eth | file          |           |       |   |                | 18085<br>OTA20 |            |  |        |           |   |        |      |    |             |     |       |        | NVMNovba | -  | Well-Andrew     | Va allegation in   | 1           |
| $\vdash$            |          |              | 87)           | Sa               | mpl        | e             |           | 44    |   |                | -CRDI          |            | 3135   | :1,1   | 749       | 8, R                                    | L12    | OV   |    |             |     |       |        | -        |  | -+              |  | -           |
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|                     |          |              | 89)           | San              |            | e<br>file     |           | 4.5   |   |                | -CRDI          |            | 3136   | :1,1   | 749       | 8, RI                                   | 16     | ملا  |    |             |     |       |        | 1        |  |                 |  |             |
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|               | _                                       | Sequence Name: C:\msdchem\1\sequence\030718.s  |                                  |                |  |
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|               |   | Instrument Control Pre-Seq Cmd: Data Analysis Pre-Seq Cmd:                                     |                                  |                |  |
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|               |   | 1) Unlinked<br>2) RearSamp 1 prime   |                                  |                |  |
|               | 1000                                    | Datafile 030718001<br>Method GEBIOTA2017   |                                  |                |  |
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|               |   | Datafile 030718002 Method GEBIOTA2017  |                                  |                |  |
|               | *************************************** | 4) RearSamp 3 HEXANE   |                                  |                |  |
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|               |   | 5) Sample 4 HEXANE   |                                  |                |  |
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|               | +                                       | 6) RearSamp 5 HEXANE<br>Datafile 030718005   |                                  |                | $\neg$   |
| ļļ            |   | Method GEBIOTA2017   |                                  |                |  |
|               |   | 7) Sample 6 HEXANE<br>Datafile 030718006   |                                  |                |  |
|               |   | Method GEBIOTA2017   |                                  |                |  |
| ļ             | -                                       | 8) RearSamp 7 1221-CCV,185538:1,17499,AR122 0\(\frac{1}{2}\)                                   | ļ                                |                |  |
|               |   | Method GEBIOTA2017   |                                  |                |  |
|               |   | 9) Sample 8 1221-CCV,185538:1,17498,AR122 • — — — — — — — — — — — — — — — — — —                |                                  |                |  |
| <b></b>       | +                                       | Method GEBIOTA2017   |                                  |                |  |
|               |   | 10) RearSamp 9 1221-CCV,185538:1,17499,AR122 9 030718009                                       | -                                |                |  |
|               |   | Method GEBIOTA2017<br>11) Sample 10 1221-CCV,185538:1,17498,AR122 <b>o</b> ⊀                   |                                  |                |  |
|               | +                                       | Datafile 030718010   |                                  |                |  |
|               |   | Method GEBIOTA2017<br>12) RearSamp 11 1653810,,17493,BIOTA -                                   |                                  |                |  |
|               |   | Datafile 030718011   |                                  |                |  |
|               | $\dashv$                                | Method GEBIOTA2017<br>13) Sample 12 1654789,,17504,BIOTA                                       |                                  |                |  |
|               |   | Datafile 030718012   |                                  |                | _  |
| in the second | 1 -                                     | 14) RearSamp 13 1653811,,17493,BIOTA \\\   |                                  |                |  |
|               |   | Datafile 030718013 Method GEBIOTA2017  |                                  |                |  |
|               | +                                       | 15) Sample 14 1654790,,17504,BIOTA   | <u> </u>                         |                | _  |
|               | 100                                     | Datafile 030718014 Method GEBIOTA2017  | E spirit strange                 |                |  |
|               |   | 16) RearSamp 15 1653812 x2, 17493, BIOTA   |                                  |                |  |
|               | -                                       | Datafile 030718015<br>Method GEBIOTA2017   | -                                |                |  |
|               |   | 17) Sample 16 1654791,,17504,BIOTA Datafile 030718016 —  |                                  |                |  |
|               | of Especial Co.                         | Method GEBIOTA2017   |                                  | -              |  |
|               | -                                       | 18) RearSamp 17 40148598001,,17493,BIOTA   |                                  | -              | $\dashv$   |
|               | -                                       | Method GEBIOTA2017   |                                  |                | _  |
| ***           |   | 19) Sample 18 40148722009,,17504,BIOTA ————————————————————————————————————                    |                                  |                |  |
|               |   | Method GEBIOTA2017   |                                  |                |  |
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|  |  |          | Datafile   |                | 030718019   | 949-1499                                |                    |  |
| and the second second  | ***  |          | Method   |                | GEBIOTA2017                                       |   |                    |  |
|  |  | 21)      | Sample<br>Datafile   | 20             | 1654792,,17504,BIOTA<br>030718020                 |   |                    | -  |
|  |  |          | Method   |                | GEBIOTA2017                                       |   | -                  |  |
| 100  | *  | 22)      | RearSamp   | 21             | 40148598003,,17493,BIOTA                          |   |                    | and the same of th |
|  | _  |          | Datafile<br>Method   | ż ·            | 030718021<br>GEBIOTA2017                          | -                                       |                    |  |
| 100  | and the second   | 23)      | Sample   | 22             | 40150295001,,17504,BIOTA                          |   |                    |  |
|  |  |          | Datafile   | :              | 030718022<br>GEBIOTA2017                          |   |                    |  |
|  |  | 241      | Method<br>RearSamp   | 23             | 40148598004,,17493,BIOTA                          |   | -                  |  |
| de d   | AL CONTRACTOR  | ,        | Datafile   | :              | 030718023   |   |                    |  |
|  |  | 25)      | Method<br>Sample   | 24             | GEBIOTA2017<br>40150295002,,17504,BIOTA           |   |                    |  |
|  |  | 231      | Datafile   |                | 030718024   | ********                                | $\vdash$           |  |
|  |  | m at t   | Method   | 2.6            | GEBIOTA2017 V<br>40148598005 x2,,17493,BIOTA      |   |                    |  |
|  | _  | 2.6)     | RearSamp<br>Datafile   | 2.5            | 030718025   | verseren<br>:                           | 7                  |  |
|  | -  |          | Method   |                | GEBIOTA2017                                       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                    |  |
|  |  | 27)      | Sample<br>Datafile   | 26             | 40150295003,,17504,BIOTA<br>030718026             |   |                    |  |
|  |  |          | Method   |                | GEBIOTA2017                                       | wineston                                | $\vdash$           |  |
|  |  | 28)      | RearSamp   | 27             | 1653813 x2,,17493,BIOTA V 030718027               |   |                    |  |
|  | _  |          | Datafile<br>Method   | •              | GEBIOTA2017                                       |   |                    |  |
|  | ***  | 29)      | Sample   | 28             | 40150295004,,17504,BIOTA                          | _                                       |                    |  |
|  |  |          | Datafile<br>Method   | •              | 030718028<br>GEBIOTA2017                          |   |                    | -  |
|  |  | 30)      | RearSamp   | 29             | 40148671001,,17493,BIOTA                          | 1941190.00                              |                    |  |
|  |  |          | Datafile   | :              | 030718029   | -                                       |                    |  |
|  |  | 31.1     | Method<br>Sample   | 30             | GEBIOTA2017<br>40150295005,,17504,BIOTA           |   |                    |  |
|  |  | H.# 1    | Datafile   |                | 030718030   | _                                       | $\vdash$           |  |
|  | Accordance   | 223      | Method   | 31             | GEBIOTA2017<br>1232-CCV, 185539:1, 17499, AR123   |   |                    |  |
|  |  | 321      | RearSamp<br>Datafile   |                | 030718031   | *************************************** |                    |  |
|  | and the same of th | - 60     | Method   | 55             | GEBIOTA2017<br>1232-CCV, 185539:1,17498, AR123 ON |   |                    |  |
|  |  | 33)      | Sample<br>Datafile   | 32             | 030718032   |   |                    |  |
|  | -  |          | Method   |                | GERIOTA2017                                       |   |                    |  |
|  | obj.   | 34)      | RearSamp   | 33             | 1232-CCV, 185539:1,17499, AR123                   |   |                    | -  |
|  |  |          | Datafile<br>Method   |                | GERIOTA 2017                                      | p400000                                 |                    |  |
|  | 4  | 35)      | Sample   | 3.4            | 1232-CCV, 185539:1,17498, AR123                   | 170000                                  | -                  |  |
|  |  |          | Datafile<br>Method   |                | 030718034<br>GEBIOTA2017                          |   |                    |  |
|  |  | 36)      | RearSamp   |                | 40148671002,,17493,BIOTA                          |   |                    | _  |
| Permanenta di mananananananananananananananananananan  | and the second   |          | Datafile<br>Method   | e <sup>i</sup> | 030718035<br>GEBIOTA2017                          | AAAA                                    |                    |  |
|  |  | 371      | Sample   | 36             | 40150295006,,17504,BIOTA                          |   |                    |  |
|  |  |          | Datafile   | <u>}</u>       | 030718036<br>GEBIOTA2017                          |   |                    | _  |
| VALUE STATE  | oli delega de la constante de  | 38)      | Method<br>RearSamp   | 37             | 40148671003,,17493,BIOTA                          |   |                    |  |
|  | -  |          | Datafile   | <b>:</b>       | 030718037   | . —                                     |                    |  |
| 100  |  | 3.9.)    | Method<br>Sample   | 38             | GEBIOTA2017<br>40150295007,,17504,BIOTA           | . entered                               |                    |  |
|  |  | J. J. J  | Datafile   |                | 030718038   |   |                    |  |
|  |  | 401      | Method<br>RearSamp   | 39             | GEBIOTA2017<br>40148671004,,17493,BIOTA           |   |                    |  |
| Section Sectio | COLUMN TO THE CO | 40)      | Datafile   |                | 030718039   |   |                    |  |
|  | <u> </u>   |          | Method   | 40             | GEBIOTA2017<br>40150295008,,17504,BIOTA           |   | -                  | and the same   |
|  |  | 41)      | Sample<br>Datafile   |                | 030718040   |   | $\vdash$           |  |
| WORKSTON OF THE PERSON OF THE  | **   |          | Method   |                | GEBIOTA2017                                       |   | -                  |  |
|  |  | 42)      | RearSamp<br>Datafile   |                | 1653814,,17493,BIOTA<br>030718041                 |   |                    |  |
|  | division and a second  |          | Method   |                | GEBIOTA2017                                       | _                                       | -                  |  |
| and the second   |  | 43)      | Sample<br>Datafile   | 42             | 40150295009,,17504,BIOTA<br>030718042             |   | -                  | ti di  |
|  |  |          | Method   | <b>z</b> .     | GEBIOTA2017                                       | AAAA                                    | H                  |  |
|  | W.   |          |  |                |   | _                                       |                    |  |
|  | ***  |          | Last Modif   | fied: Wed      | Mar 07 12:34:27 2018                              | Page: 2                                 | 4400000            | ***************************************  |
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|  | ~  |          | 1 1)   |                | 1 1   | 7 1                                     | 210                |  |
| 15   | 1)   | ),       | 1 V  | , 2            | 1818 Im O Com                                     | 3-8                                     | -18                |  |
|  |  | S/enec   |  |                | Date Signed                                       | D                                       | Date               |  |

|          | Sequence Name: C:\msdchem\1\sequence\030518.s  |  |
|----------|--|--|
|          | Comment: Operator:   |  |
|          | Data Path: C:\MSDCHEM\1\DATA\030518\ Instrument Control Pre-Seq Cmd:                               |  |
|          | Data Analysis Pre-Seq Cmd:   |  |
|          | Instrument Control Post-Seq Cmd: Data Analysis Post-Seq Cmd:                                       |  |
|          | Mothod Sections To Run Sequence Barcode Options  |  |
|          | (X) Full Method (X) On Mismatch, Inject Anyway ( ) Reprocessing Only ( ) On Mismatch, Don't Inject |  |
|          | ( ) Reprocessing Only ( ) Barcode Disabled   |  |
|          | Line Sample Name/Misc Info   |  |
|          | 1) RearSamp 1 HEXANE Datafile  |  |
|          | Method SCREEN2014 2) Sample 2 HEXANE   |  |
|          | Method SCREEN2014  |  |
|          | 3) RearSamp 3 1654574MB<br>Datafile  |  |
|          | Method SCREEN2014 4) Sample 4 1654575LCS   |  |
|          | Datafile   |  |
|          | 5) RearSamp 5 1654576MS. Datafile  |  |
|          | Method SCREEN2014  6) Sample 6 1654577MSD  |  |
|          | Datafile Method SCREEN2014   |  |
|          | 7) RearSamp 7 40165301-001 Datafile  |  |
| l        | Method SCREEN2014<br>8) Sample 8 40165355-001  |  |
|          | Datafile Method SCREEN2014   |  |
|          | 9) RearSamp 9 40165195-001 Datafile  |  |
|          | Method SCREEN2014  10) Sample 10 40165196-001  |  |
|          | Datafile SCREEN2014  |  |
|          | 11) RearSamp 11 40165196-002 Datafile  |  |
|          | Method SCREEN2014  |  |
|          | Datafile   |  |
|          | 13) RearSamp 13 40165196-004   |  |
|          | Method SCREEN2014  |  |
| <b>-</b> | Datasila   |  |
| <u> </u> | 15) RearSamp 15 1653810MB . Prom   |  |
|          |  |  |
|          | Datafile   |  |
|          | 17) RearSamp 17 1653812MS 🛪 🏖 🗸  | Year of the second seco |
|          | Method SCREEN2014  |  |
|          | Datafile   |  |
|          | 19) RearSamp 19 40148598-002   |  |
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#### PROJECT YOGCST Screener 03/05/18

|          | ·                                       |          |               |                      |                  |  |                |             |          |     |       |         |        |                |          | ···           | ,        |
|----------|---|----------|---------------|----------------------|------------------|--|----------------|-------------|----------|-----|-------|---------|--------|----------------|----------|---------------|----------|
|          |   |          |               |                      |                  |  |                | access .    |          |     | -     |         |        |                |          |               |          |
|          | <b></b>                                 |          | 20            | Method<br>Sample     | 20               | SCREEN2014<br>40148598-003 -               | •              |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          | 21            | RearSamp             | 21               | 40148598-004                               | •              |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile<br>Method   |                  | SCREEN2014                                 |                | <i>*</i>    |          |     |       |         |        |                |          |               |          |
|          | -                                       | 1        | 22)           | Sample               | 22               |  | ROS × 2        | V           |          |     |       |         |        |                |          |               |          |
|          |   |          | ·             | Datafile             |                  |  | /              | -           |          |     |       |         |        |                |          |               |          |
|          |   |          | 23)           | Method<br>RearSamp   | 23               | SCREEN2014<br>1653813DUP x 2               |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile             |                  |  |                |             |          |     |       |         | ~      | ·              |          |               |          |
|          |   |          | .24.)         | Method<br>Sample     | 24               | SCREEN2014<br>40148671-001 -               | •              |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile             |                  | ~~~~~                                      |                |             |          |     |       |         |        |                |          |               |          |
|          |   | +        | 25)           | Method<br>RearSamp   | 25               | SCREEN2014<br>40148671-002                 | -              |             |          |     |       |         | -      |                |          |               |          |
|          |   |          |               | Datafile             |                  | *** *** *** *** *** *** ***                |                |             |          |     |       |         |        |                |          |               | ·        |
|          |   |          | 26)           | Method<br>Sample     | 26               | SCREEN2014<br>40148671-003                 |                |             |          |     |       |         |        |                |          |               |          |
|          |   | +        |               | Datafile             |                  | man from South State and Apple Spine Spine | ¢              |             |          |     |       |         | ~      |                |          |               |          |
|          |   |          | 2.7)          | Method<br>RearSamp   | . 27             | SCREEN2014<br>40148671-004RQ               | Ç inum         |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile             |                  |  | <del>-</del> ? |             |          |     |       |         |        |                |          |               |          |
|          |   | +-       | 28)           | Method<br>Sample     | 28               | SCREEN2014<br>1653814DUP —                 |                |             |          |     |       |         | +      |                |          |               |          |
|          |   |          |               | Datafile             |                  | ne me en en en anten                       |                |             |          |     |       |         | 1      |                |          |               |          |
|          |   |          | 29)           | Method<br>RearSamp   | 29               | SCREEN2014<br>40148671-005                 |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         | -      |                |          |               |          |
|          |   |          | 30)           | Sample               | 30               | 40148671-006 -                             |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          | 31)           | RearSamp             | 31               | 40148722-001                               |                |             |          |     |       |         | +      |                |          |               |          |
|          |   | <u> </u> |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         | 4      |                |          |               |          |
|          |   |          | 32)           | Sample               | 32               | 40148722-002 -                             | • •            |             |          |     |       |         |        |                |          | 1             |          |
|          |   |          |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         | 1      |                |          |               |          |
|          |   | ļ        | 33)           | RearSamp             | 33               | 40148722-003 🗶                             | 2              |             |          |     |       |         | +      |                |          |               |          |
|          |   | 1        |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          | 34)           | Sample<br>Datafile   | 34               | 40148722-004                               | •              |             |          |     |       |         |        |                |          |               |          |
|          |   |          | 212.          | Method               |                  | SCREEN2014                                 |                |             |          |     |       |         | 4      |                |          |               |          |
|          |   |          | 35)           | RearSamp<br>Datafile | 35               | 40148722-005 _                             |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          | والموارية     | Method               |                  | SCREEN2014                                 |                |             |          |     |       |         |        |                |          |               |          |
|          |   | · ·      | 30)           | Sample<br>Datafile   | 36               | 40148722-006                               |                |             |          |     |       |         | +      |                |          | $\dashv$      | -        |
|          |   |          | an.           | Method               | o.m              | SCREEN2014                                 |                |             |          |     |       |         | 1      |                |          |               |          |
|          |   |          | 3.1)          | RearSamp<br>Datafile | 37               | 40148722-007                               |                |             |          |     |       |         |        | ***********    |          |               |          |
|          |   |          | 3.60          | Method<br>Sample     | 5.0              | SCREEN2014                                 |                |             |          |     |       |         | +      |                |          |               |          |
|          |   |          | 201           | Datafile             | 3.8              | 40148722-008                               |                |             |          |     |       |         | 4      |                |          |               |          |
|          |   |          | 301           | Method               | 26               | SCREEN2014                                 |                |             |          |     |       |         |        |                |          |               |          |
| _        |   |          | 55).          | RearSamp<br>Datafile | 39               | 1655024MB                                  |                |             |          |     |       |         | +      |                | -        | $\overline{}$ |          |
|          |   |          | 40)           | Method<br>Sample     | 40               | SCREEN2014<br>1655025LCS                   |                |             |          |     |       |         | 4      |                |          |               |          |
|          |   |          | - 47          | Datafile             |                  |  |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          | 41)           | Method<br>RearSamp   |                  | SCREEN2014<br>1655026MS                    |                |             |          |     |       |         | 1      |                |          |               |          |
|          |   |          | •             | Datafile             |                  | ···  |                |             |          |     |       |         | +      |                |          | $\dashv$      | $\dashv$ |
|          |   |          | 42)           | Method<br>Sample     |                  | SCREEN2014<br>1655027MSD                   |                |             |          |     |       |         |        |                |          |               |          |
|          |   |          |               | Datafile<br>Method   |                  | SCREEN2014                                 |                |             |          |     |       |         |        |                |          |               |          |
| -        |   |          | 43)           | RearSamp             |                  | 40164936-001                               |                |             |          |     |       |         | +      |                | $\dashv$ |               |          |
|          |   |          |               | Datafile             | *                |  |                |             |          |     |       |         | 1      |                |          |               |          |
|          | *************************************** |          | L             | ast Modified         | di Mon I         | Mar 05 17:22:19                            | 2018           |             |          |     | Pag   | e: 2    | 2      |                |          |               |          |
|          |   |          |               |                      |                  |  |                |             | P.       | M   | 2 11= | 110     | , †    | $\neg \dagger$ |          |               |          |
| -        |   |          |               |                      | <del>    .</del> |  | +              |             | <u> </u> | 17. | 3/15  |         |        |                |          | L             | -        |
|          | *************************************** |          |               |                      |                  |  |                |             |          |     | Conti | inued o | n Page | !              | _        |               |          |
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| D        |   | 1        | $\mathcal{D}$ | 11                   |                  | -1   | -51            | 2/1         | ///      |     | /     |         | 1 /    | 15/            | / 2      |               |          |
| <b>b</b> | بإبرا                                   |          | 1 lens        | 4                    |                  | 3/15/18                                    | -/3            | VL 6        |          | Ł   |       |         |        |                | ·        |               | - 1      |
|          | -/1                                     |          | Agigi         | ied /                |                  | Date                                       |                |             | Signed   |     |       |         |        | υa             | ite      |               | - 1      |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TZ1-170418-01-STB-05

Lab Name: Pace Analytical - Green Bay SDG No. : 40148598 Contract: HUDSON RIVER REMEDIAL

Lab Sample ID: 40148598001 Percent Moisture:

| CAS | No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|-----|-----|---------|---------------|---|-------|----|--------------------|
|     | L   | ipid    | 1.9           |   | %     | 1  | 03/07/2018 06:41   |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TZ1-170418-01-STB-04

Lab Name: Pace Analytical - Green Bay SDG No. : 40148598 Contract: HUDSON RIVER REMEDIAL
Lab Sample ID: 40148598002 Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 0.34          |   | %     | 1  | 03/07/2018 06:41   |



### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TZ1-170418-01-STB-03

| Lab Name: Pace Analytical - Green Bay | SDG No. : 40148598 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|--------------------|-----------|-----------------------|
| Lab Sample ID: 40148598003            |                    | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 1.6           |   | %     | 1  | 03/07/2018 06:41   |



### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TZ1-170418-01-STB-02

Lab Name: Pace Analytical - Green Bay SDG No. : 40148598 Contract: HUDSON RIVER REMEDIAL

Lab Sample ID: 40148598004 Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 4.8           |   | %     | 1  | 03/07/2018 06:41   |

1

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TZ1-170418-01-STB-01

 Lab Name:
 Pace Analytical - Green Bay
 SDG No. : 40148598
 Contract:
 HUDSON RIVER REMEDIAL

 Lab Sample ID:
 40148598005
 Percent Moisture:

| CAS No | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|--------|---------|---------------|---|-------|----|--------------------|
|        | Lipid   | 2.7           |   | %     | 1  | 03/07/2018 06:41   |



#### FORM III INORGANIC-1 BLANKS

| Lab Name: Pace Analytical - | Green Bay SDG | No.: <u>40148598</u> | Contract : HUDSO      | N RIVER REMEDI | AL ACTION M |    |
|-----------------------------|---------------|----------------------|-----------------------|----------------|-------------|----|
| Method Blank Matrix: Tissu  | ıe            | Instrumen            | ID: 40BALL            |                |             |    |
| Method Blank Concentration  |               |                      |                       |                |             |    |
| Analyte                     | Calibration   | Con                  | tinuing Calibration E | Blank          | Method Bla  | nk |
|                             | С             | С                    | С                     | С              | 1653924     | С  |
| Lipid                       |               |                      |                       |                | <0.030      | U  |



#### FORM VI INORGANIC-1 DUPLICATES

SAMPLE NO.

1653927DUP

| Lab Name: Pace Analytic | cal - Green Bay | _SDG No. : 4014859   | 8        | Contract: | <b>HUDSON</b> F | RIVER REMED | IAL |
|-------------------------|-----------------|----------------------|----------|-----------|-----------------|-------------|-----|
| Matrix: <u>Tissue</u>   |                 | Concentration Units: | <u>%</u> |           |                 |             |     |
| Percent Moisture:       |                 | Basis: Wet           |          |           |                 |             |     |
|                         |                 |                      |          |           |                 | 1           |     |
|                         |                 |                      |          |           |                 | 1           |     |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 2.7    | 2.1       | 25  |



#### FORM VI INORGANIC-2 **DUPLICATES**

SAMPLE NO. 1653928DUP

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40148598      | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|------------------------|-----------|-----------------------|
| Matrix: <u>Tissue</u>                 | Concentration Units: % |           |                       |
| Percent Moisture:                     | Basis: Wet             |           |                       |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 1.6    | 2.2       | 27  |

Non SDG Parent

## Pace Analytical Prep Log Report

**Batch Information: OEXT 282285 LIPIDS** 

Template Version: F-GB-O-145-Rev.00 (17Feb2015) LIPID

|      |  | _   |                   | (           |
|------|--|---|-------------------|-------------|
| 4014 | Analysis Method . Pace Lipid Reviewed By BLM | Analyzed By AMC Reviewed By Date 05/01/2018 10:01 | Instrument 40BALL | Batch Notes |
| 859  | Sample Information:                          |   |                   |             |

|                   | 90          | <u>Q</u>     |        | sted          | 9   1                   | ight                 | nme                   | 7             | it (g)          | 1(9)               | -             | es           |
|-------------------|-------------|--------------|--------|---------------|-------------------------|----------------------|-----------------------|---------------|-----------------|--------------------|---------------|--------------|
| 2C Rule           | Sample Type | ab Sample ID | Select | ipid % Posted | n Date/                 | Sample Weight<br>(g) | Sample Volume<br>(mL) | Aliquot (mL)  | Jish Weight (g) | ory Weight 1 (g)   | Dry Wit Use 1 | Sample Notes |
| <b>ō</b><br>Lipid | BLANK       | 1653924      | y      | -0.005000     | 98/07/2018              | 10                   | <u> නී පි</u><br>5    | <b>₹</b><br>1 | 万<br>0.9316     | <u>م</u><br>0.9315 | <u>ā</u><br>м | ပိ           |
| LIPID             | BLANK       | 1653925      | Y      | -0.005000     | 06:41:31<br>03/07/2018  | 10                   | 5                     | 1             | 0.9331          | 0.933              | M             |              |
| LIPID             | PS          | 40148598001  | Y      |               | 06:41:31<br>03/07/2018  | 10.0375              | 5                     |               | 0.9331          |                    | M             |              |
| -                 | -           | ļ            |        | 1.863         | 06:41:31<br>Ø3/07/2018  |                      |                       | 1             |                 | 0.9695             |               |              |
| LIPID             | PS          | 40148598002  | Y      | 0.3401        | 06:41:31                | 9.9964               | 5                     | 1             | 0.9322          | 0.939              | М             |              |
| LIPID             | PS          | 40148598003  | Y      | 1.615         | 03/07/2018<br>06:41:31  | 10.0303              | 5                     | 1             | 0.9311          | 0.9635             | М             |              |
| LIPID             | PS          | 40148598004  | Y      | 4.808 V       | 03/07/2018<br>06:41:31  | 10.0362              | 5                     | 1             | 0.9307          | 1.0272             | М             |              |
| LIPID             | RQS         | 40148598005  | Y      | 2.671         | 03/07/2018<br>06:41:31  | 10.0161              | 5                     | 1             | 0.9313          | 0.9848             | М             |              |
| LIPID             | DUP         | 1653927      | Y      | 2.076         | /03/07/2018<br>06:41:31 | 9.9969               | 5                     | 1             | 0.9346          | 0.9761             | М             |              |
| LIPID             | PS          | 40148671001  | Y      | 1.520         | 03/07/2018<br>06:41:31  | 10.0022              | 5                     | 1             | 0.9343          | 0.9647             | М             |              |
| LIPID             | PS          | 40148671002  | Y      | 3.880         | 03/07/2018<br>06:41:31  | 9.9993               | 5                     | 1             | 0.9353          | 1.0129             | М             |              |
| LIPID             | PS          | 40148671003  | Y      | 0.5298        | 03/07/2018<br>06:41:31  | 10.0038              | 5                     | 1             | 0.9329          | 0.9435             | М             |              |
| LIPID             | RQS         | 40148671004  | Y      | 1.647         | 03/07/2018<br>06:41:31  | 9.9888               | 5                     | 1             | 0.9328          | 0.9657             | М             |              |
| LIPID             | DUP         | 1653928      | Y      | 2.152         | 03/07/2018<br>06:41:31  | 9.9904               | 5                     | 1             | 0.9365          | 0.9795             | М             |              |
| LIPID             | PS          | 40148671005  | Y      | 1.605         | 03/07/2018<br>06:41:31  | 10.0329              | 5                     | 1             | 0.9322          | 0.9644             | М             |              |
| LIPID             | PS          | 40148671006  | Y      | 6.228         | 03/07/2018<br>06:41:31  | 9.995                | 5                     | 1             | 0.9322          | 1.0567             | М             |              |
| LIPID             | PS          | 40148722001  | Y      | 2.478         | 03/07/2018<br>06:41:31  | 9.9867               | 5                     | 1             | 0.9354          | 0.9849             | М             |              |
| LIPID             | PS          | 40148722002  | Y      | 2.118         | 03/07/2018<br>06:41:31  | 9.9641               | 5                     | 1             | 0.9316          | 0.9738             | М             |              |
| LIPID             | PS          | 40148722003  | Y      | 3.594         | 03/07/2018<br>06:41:31  | 9.9603               | 5                     | 1             | 0.9331          | 1.0047             | М             |              |
| LIPID             | PS          | 40148722004  | Y      | 2.644         | 03/07/2018<br>06:41:31  | 9.9858               | 5                     | 1             | 0.9324          | 0.9852             | М             |              |

# Prace Analytical Prep Log Report

| 40148598_ | 3C Rule | Sample Type | ab Sample ID | elect | ipid % Posted | Run Date/Time          | D<br>Sample Weight<br>(g) | Sample Volume<br>(mL) | Aliquot (m.L) | Jish Weight (g) | ry Weight 1 (g) | ry Wt Use 1 | Sample Notes |
|-----------|---------|-------------|--------------|-------|---------------|------------------------|---------------------------|-----------------------|---------------|-----------------|-----------------|-------------|--------------|
| Rev2      | LIPID   | PS          | 40148722005  | Y     | 2.339         | 03/07/2018<br>06:41:31 | 9.96                      | 5                     | 1             | 0.9329          | 0.9795          | M M         | · · · ·      |
|           | LIPID   | PS          | 40148722006  | Y     | 2.337         | 03/07/2018<br>06:41:31 | 10.0363                   | 5                     | 1             | 0.9276          | 0.9745          | М           |              |
|           | LIPID   | PS          | 40148722007  | Y     | 3.963         | 03/07/2018<br>06:41:31 | 10.0057                   | 5                     | 1             | 0.937           | 1.0163          | М           |              |
|           | LIPID   | PS          | 40148722008  | Y     | 0.7466        | 03/07/2018<br>06:41:31 | 9.9787                    | 5                     | 1             | 0.9308          | 0.9457          | М           |              |
|           | LIPID   | MS          | 1682000      | Y     | 2.478         | 03/07/2018<br>06:41:31 | 9.9892                    | 5                     | 1             | .9346           | 0.9841          | М           |              |

| Client Name:             | 12    |          |
|--------------------------|-------|----------|
| Project #:               | 40148 | 598      |
| Date/Time Removed to Tha | w:    | 02-20-18 |
| Date/Time Prepped:       |       | 02-21-18 |
|                          |       |          |

40148598\_Rev2

**Biota Homogenization Log (NYDOH Method)** 

Pace Analytical

Prepped by: CWN+JL+RM 4407 Location: 40FRG21 /Room Temperature(circle one) Logbook: Composite Picture of Internal Sample Scales/Skin Whole Fish/Weight Gender Organs Fillet Picture of Weight of (> 1 per Body/Fillet Sample Type (Optional) Left/Both Container Removed Taken? Total Fish Intact Weight Jars/Weight homogenized Sample ID) Sample ID (Fish, Eggs, etc.) (Y/N) (WB/F) (Y/N) Weight (g) M/F/I<sup>3</sup> Fillet1? Code<sup>2</sup> (Y/N) (g) Taken? (Y/N) Sample (g) (Y/N) Sample Comments FICH Left Both Kobo 528 9 (Left) Both H 2. 5985 (Left /Both F FIEL 7769 (Em) Both FISH V 5 FISH 55501 1198.2 (Left/ Both 32 AG F M Left / Both Left / Both Left / Both 414 Left / Both of 414 Left / Both Left Leoth Left / Both Left / Both Left / Both WN -02-22-19 Left / Both Left / Both

(1) If left fillet weight is under 40g, the right fillet in included in the sample weight.

(3) M = Male, F = Female, I = Indeterminate F-GB-O-153-REV.00 (08Feb2018) Pace Analytical Services, LLC - Green Bay, WI Reviewed By

Date

Page 9



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

Sample: TZ1-170418-01-STB-05

Lab ID: 40148598001

Collected: 04/18/17 17:48 Received: 04/19/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL             | MDL         | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-----------------|-------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod   F | Preparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4      | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 70.1       | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 75.1       | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 75.4       | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 11096-82-5 |      |
| PCB, Total               | 221        | ug/kg       | 49.8            | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 1336-36-3  |      |
| Surrogates               |            |             |                 |             |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 86         | %           | 60-140          |             | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 86         | %           | 60-140          |             | 1    | 03/02/18 06:50 | 03/07/18 15:18 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi   | ng          |      |                |                |            |      |
| Gender                   | Female     |             |                 |             | 1    |                | 02/21/18 14:53 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid         |             |      |                |                |            |      |
| Lipid                    | 1.9        | %           | 0.030           | 0.030       | 1    |                | 03/07/18 06:41 |            |      |

#### REPORT OF LABORATORY ANALYSIS

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Page 9 of 19



#### **ANALYTICAL RESULTS**

Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40148598

Date: 05/01/2018 10:27 AM

Sample: TZ1-170418-01-STB-04 Lab ID: 40148598002 Collected: 04/18/17 17:44 Received: 04/19/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL.        | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | A 8082A Mod   | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 19.0J      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 28.9J      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 28.8J      | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 11096-82-5 |      |
| PCB, Total               | 76.7       | ug/kg       | 50.0          | 11.4        | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 1336-36-3  |      |
| Surrogates               |            |             |               |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | 73         | %           | 60-140        |             | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 82         | %           | 60-140        |             | 1     | 03/02/18 06:50 | 03/07/18 15:35 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ng          |       |                |                |            |      |
| Gender                   | Female     |             |               |             | 1     |                | 02/21/18 14:53 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid       |             |       |                |                |            |      |
| Lipid                    | 0.34       | %           | 0.030         | 0.030       | 1     |                | 03/07/18 06:41 |            |      |

#### REPORT OF LABORATORY ANALYSIS

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Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

Sample: TZ1-170418-01-STB-03

Lab ID: 40148598003

Collected: 04/18/17 17:42 Received: 04/19/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL         | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|-------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod   | Preparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4      | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 67.9       | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 86.0       | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 104        | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 11096-82-5 |      |
| PCB, Total               | 258        | ug/kg       | 49.8          | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 1336-36-3  |      |
| Surrogates               |            |             |               |             |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 88         | %           | 60-140        |             | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 91         | %           | 60-140        |             | 1    | 03/02/18 06:50 | 03/07/18 15:51 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ing         |      |                |                |            |      |
| Gender                   | Male       |             |               |             | 1    |                | 02/21/18 14:53 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid       |             |      |                |                |            |      |
| Lipid                    | 1.6        | %           | 0.030         | 0.030       | 1    |                | 03/07/18 06:41 |            |      |

### REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

Sample: TZ1-170418-01-STB-02

Lab ID: 40148598004

Collected: 04/18/17 17:40 Received: 04/19/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL                   | MDL         | DF   | Prepared       | Analyzed                | CAS No.    | Qual |
|--------------------------|------------|-------------|-----------------------|-------------|------|----------------|-------------------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod           | Preparation | Meth | od: EPA 3541   |                         |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4      | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 73.0       | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 94.6       | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07 <b>/</b> 18 16:07 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 96.2       | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 11096-82-5 |      |
| PCB, Total               | 264        | ug/kg       | 49.8                  | 11.4        | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 1336-36-3  |      |
| Surrogates               |            |             |                       |             |      |                |                         |            |      |
| Tetrachloro-m-xylene (S) | 102        | %           | 60-140                |             | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 95         | %           | 60-140                |             | 1    | 03/02/18 06:50 | 03/07/18 16:07          | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender T <b>y</b> p | ing         |      |                |                         |            |      |
| Gender                   | Male       |             |                       |             | 1    |                | 02/21/18 14:53          |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid               |             |      |                |                         |            |      |
| Lipid                    | 4.8        | %           | 0.030                 | 0.030       | 1    |                | 03/07/18 06:41          |            |      |

Date: 05/01/2018 10:27 AM



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40148598

Sample: TZ1-170418-01-STB-01

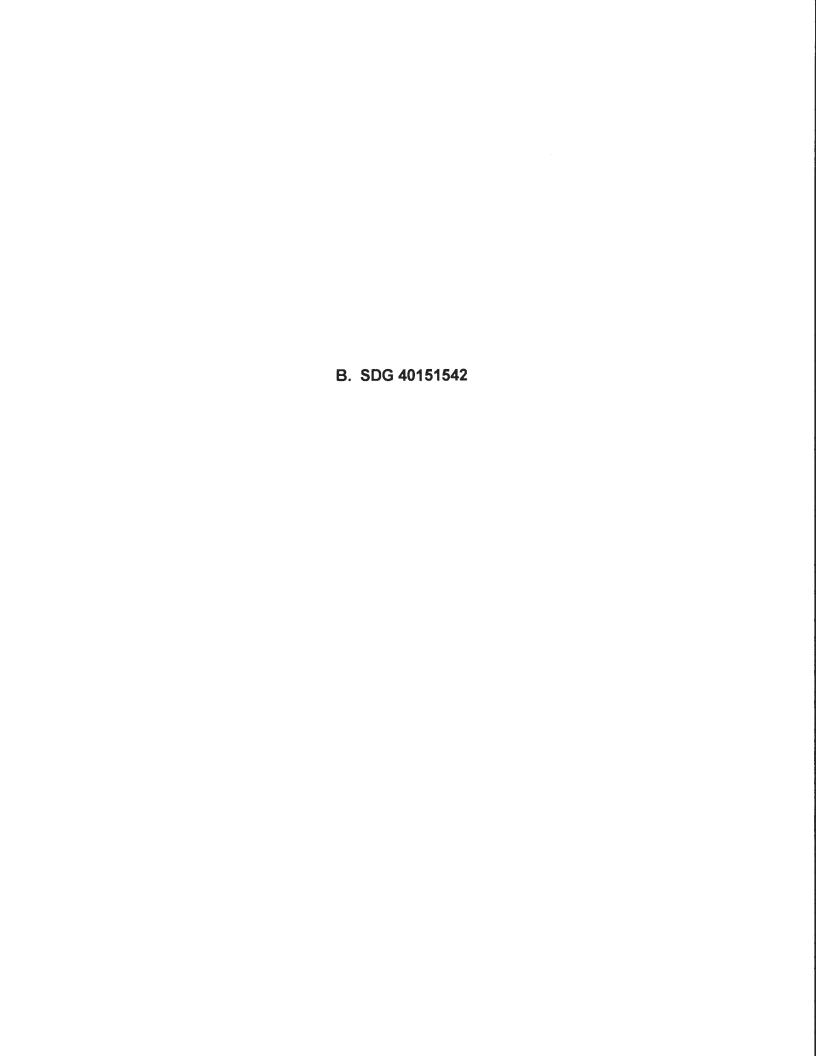
Lab ID: 40148598005

Collected: 04/18/17 17:35 Received: 04/19/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL         | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|-------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod   | Preparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <22.8      | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <22.8      | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <22.8      | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <22.8      | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 229        | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 253        | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 274        | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 11096-82-5 |      |
| PCB, Total               | 756        | ug/kg       | 99.8          | 22.8        | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 1336-36-3  |      |
| Surrogates               |            | 0 0         |               |             |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 89         | %           | 60-140        |             | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 99         | %           | 60-140        |             | 2    | 03/02/18 06:50 | 03/07/18 16:23 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ng          |      |                |                |            |      |
| Gender                   | Male       |             |               |             | 1    |                | 02/21/18 14:53 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid       |             |      |                |                |            |      |
| Lipid                    | 2.7        | %           | 0.030         | 0.030       | 1    |                | 03/07/18 06:41 |            |      |

Date: 05/01/2018 10:27 AM





#### ORGANIC ANALYSIS SUPPORT DOCUMENTATION

|  | I COMIT       | 10 /11/   | \L   O    | 0 001    |        | . 200                                   | E      | MIAIR      | J14        |        |                |              |             |         |
|--|---------------|-----------|-----------|----------|--------|---|--------|------------|------------|--------|----------------|--------------|-------------|---------|
| ESI project name:  | GEHF          | RAMP      |           |          |        |   | Re     | viewed b   | ογ:        | JA 5/3 | 1/18           |              |             |         |
| Sample Collection Dates:   | 6/12/1        | 7         |           |          |        |   | Ар     | proved b   | Эу:        | AAA    | AW             | 1            |             |         |
| Job Number:  | 20115         | 678.H0    | 00        |          |        | (                                       | -      | etion Dat  | -          | 1V (   | 010            |              | -           |         |
| Project Manager:   | Meg N         |           |           |          |        |   |        |            | _          |        | 6115           | 5            |             |         |
| Laboratory:  | Pace          |           |           |          | Annli  | cable S                                 | Sample | No's ()    | <b>x</b> ) | Refer  | to Tab         | le 1 in t    | the         |         |
| Editional y.   |               |           |           |          | Appli  | cabic c                                 | Jampic | 7 140 3 (7 |            |        |                | rance F      |             |         |
|  |               |           |           |          |        |   |        |            |            | •      | •              |              |             |         |
|  |               |           |           |          | 0      | t. Ni.                                  |        |            |            | 1 -1 0 |                | N.I          |             |         |
| 5 V 44 015 (5 W  |               |           |           |          |        | le No.                                  |        |            |            | Lab C  | ontroi         | <u> 140.</u> |             |         |
| Deliverable: CLP (Full)  | ( )           |           |           |          | Reter  | to Tab                                  | le 1   |            |            |        |                |              |             |         |
| Level IV (Full)  | ( )           |           |           |          |        |   |        |            |            |        |                |              |             |         |
| Limited  | ( )           |           |           |          |        |   |        |            |            |        |                |              |             |         |
| Other:   | Full Pe       | er Phase  | e 2       |          |        |   |        |            |            |        |                |              |             |         |
| _  | RAMP          | QAPP      |           |          |        |   |        |            |            |        |                |              |             |         |
|  |               |           |           |          |        |   |        |            |            |        |                |              |             |         |
|  | Cr            | iteria E  | vamina    | ad in D  | otail  | T                                       | Proble | ms Ider    | ntifia     | d      | l s            | innort       | Documer     | ntation |
|  |               | iteria L  | Aaiiiiiit | a III D  | Clan   | '                                       | TODIC  | illis idei | itille     | u      | "              |              | achment     |         |
|  |               |           |           |          |        |   |        |            |            |        |                |              |             |         |
| 70 60 3 411 3 8 4 9 4 9 4 9 4  | Ch            | neck (√)  | if Yes    | or Footi | note   |   |        | if Yes or  |            |        |                |              | if Yes or F |         |
| The following table indicates criteria that were examined, the identified problems,  | Le            | etter for | Comm      | ents Be  | low    | Lett                                    | er for | Commer     | nts B      | elow   | Let            | ter for (    | Comment     | s Below |
| and support documentation attachments  |               |           |           |          | -      |   |        |            |            |        |                |              |             |         |
|  | ZA            |           |           |          |        | l ≾                                     |        |            |            |        | ξ <sub>2</sub> |              |             |         |
|  | 8082A         |           |           |          |        | 8082A                                   |        |            |            |        | 8082A          |              |             |         |
|  | - ω           |           |           |          | **     | ~                                       |        |            |            |        | - ∞            |              |             |         |
| Holding Times  | X             |           |           |          |        |   | 100000 |            |            |        | X              |              |             |         |
| Blank Analysis: Target Cmpds   | $\frac{1}{x}$ |           |           |          |        | ļ                                       |        |            |            |        | x              |              |             |         |
| Sys Montr Cmps/Surrogates  | X             |           |           |          |        |   |        |            |            | -      | X              |              |             |         |
| Matrix Spike/Matrix Spike Duplicate  | X             |           |           |          |        |   |        |            |            |        | X              |              |             |         |
| Blank Spike  | X             |           |           |          |        |   |        |            |            |        | Х              |              |             |         |
| Duplicate Analysis ( ) Field ( X ) Lab   | X             |           |           |          |        |   |        |            | ,          | -      | X              | -            |             |         |
| Detection Limit/Sensitivity  |               |           | <u> </u>  | <u> </u> |        |   |        |            |            |        |                |              |             |         |
| Qualitative Identification: Target Cmpds Qualitative Identification: TICs  | X             |           |           |          |        |   |        |            |            |        | X              | <u> </u>     |             |         |
| DFTPP & BFB Mass Tuning  |               |           |           | -        |        | *************************************** |        |            |            |        |                |              | <u> </u>    |         |
| GC Instrument Performance  |               |           |           |          |        |   |        |            |            |        |                | -            |             |         |
| Initial Calibrations   | X             |           |           |          |        |   |        |            |            |        | Х              |              |             |         |
| Continuing Calibrations  | Х             |           |           |          |        |   |        |            |            |        | Х              |              |             |         |
| Quantitation of Results  | X             |           | <u> </u>  |          | ··     | X                                       |        |            |            |        | X              |              |             |         |
| DDT/Endrin Breakdown Surrogate Retention Time Shifts   | X             |           |           |          |        |   |        |            |            |        | X              |              |             |         |
| Internal Standards Performance   | ^             |           |           |          |        |   |        |            |            | -      | -^-            |              |             |         |
| Resolution Check Standards   |               |           |           |          |        |   |        |            |            |        |                |              |             |         |
| Analytical Sequence  | X             |           |           | <u> </u> |        |   |        |            |            |        | Х              | <u> </u>     |             |         |
| Florisil Cartridge & GPC Calibration   |               |           |           |          |        |   |        |            |            |        | <b>.</b>       |              |             |         |
| GC Column Agreement  |               |           |           |          | ***    |   |        |            |            |        |                |              |             |         |
|  | X             | į         |           | ļ        |        | ļ                                       |        |            |            |        | X              |              | ļ           |         |
| Percent Solids Others:   | -             |           |           | -        |        |   |        |            |            |        |                |              |             |         |
| Outers. Washington Annual Control of the Control of | <u> </u>      |           | 1         | <u> </u> |        |   | l .    |            |            |        | Ь              |              | <u> </u>    |         |
| Comments: Results < RL should be cor   | nsidered      | l estima  | ted. To   | tal PCE  | 3 resu | lts calc                                | ulated | with est   | imate      | ed Aro | clor re        | sults sh     | ould be     |         |
| considered estimated.  |               |           |           |          |        |   |        |            |            |        |                |              |             |         |

# PCB - FORM II SVOA-1 TISSUE SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No.: 40151542 Contract: HUDSON RIVER REMEDIAL

Instrument ID: 40GCSJ

| LAB SAMPLE ID | SAMPLE NAME          | DCBP | тсмх |
|---------------|----------------------|------|------|
| 1652256       | 1652256BLANK         | 82   | 68   |
| 1652257       | 1652257LCS           | 83   | 65   |
| 1652258       | 1652258MS            | 101  | 79   |
| 1652259       | 1652259DUP           | 99   | 74   |
| 40151542001   | TD4-170612-01-SMB-01 | 89   | 84   |
| 40151542002   | TD3-170612-01-SMB-05 | 105  | 81   |
| 40151542003   | TD3-170612-01-SMB-04 | 101  | 84   |
| 40151542004   | TD3-170612-01-SMB-03 | 105  | 76   |
| 40151542005   | TD3-170612-01-SMB-02 | 93   | 73   |
| 40151542006   | TD3-170612-01-SMB-01 | 77   | 64   |

(DCBP) = Decachlorobiphenyl (S)

(TCMX) = Tetrachloro-m-xylene (S)

\* Values outside of QC Limits

QC LIMITS (60-140) (60-140)



#### QUALITY CONTROL DATA

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

QC Batch:

281918

Analysis Method:

EPA 8082A Mod

QC Batch Method:

EPA 3541

Analysis Description:

8082 GCS PCB

Associated Lab Samples:

 $40151542001,\,40151542002,\,40151542003,\,40151542004,\,40151542005,\,40151542006$ 

METHOD BLANK: 1652256

Matrix: Tissue

Associated Lab Samples: 40151542001, 40151542002, 40151542003, 40151542004, 40151542005, 40151542006

| Parameter                | Units | Blank<br>Result | Reporting<br>Limit | MDL  | Analyzed       | Qualifiers |
|--------------------------|-------|-----------------|--------------------|------|----------------|------------|
| PCB-1016 (Aroclor 1016)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | <11.4           | 50.0               | 11.4 | 02/28/18 08:50 |            |
| Decachlorobiphenyl (S)   | %     | 82              | 60-140             |      | 02/28/18 08:50 |            |
| Tetrachloro-m-xylene (S) | %     | 68              | 60-140             |      | 02/28/18 08:50 |            |

| LABORATORY CONTROL SAMPLE: | 1652257 |
|----------------------------|---------|

|                          |       | Spike | LCS    | LCS   | % Rec  |            |
|--------------------------|-------|-------|--------|-------|--------|------------|
| Parameter                | Units | Conc. | Result | % Rec | Limits | Qualifiers |
| PCB-1016 (Arodor 1016)   | ug/kg |       | <11.4  |       |        |            |
| PCB-1221 (Aroclor 1221)  | ug/kg |       | <11.4  |       |        |            |
| PCB-1232 (Aroclor 1232)  | ug/kg |       | <11.4  |       |        |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | 250   | 215    | 86    | 70-130 |            |
| PCB-1248 (Aroclor 1248)  | ug/kg |       | <11.4  |       |        |            |
| PCB-1254 (Aroclor 1254)  | ug/kg |       | <11.4  |       |        |            |
| PCB-1260 (Aroclor 1260)  | ug/kg |       | <11.4  |       |        |            |
| Decachlorobiphenyl (S)   | %     |       |        | 83    | 60-140 |            |
| Tetrachloro-m-xylene (S) | %     |       |        | 65    | 60-140 |            |
|                          |       |       |        | ,     |        |            |

| MATRIX SPIKE SAMPLE:     | 1652258 |             |       |        |       |        |               |
|--------------------------|---------|-------------|-------|--------|-------|--------|---------------|
|                          |         | 40151542004 | Spike | MS     | MS    | % Rec  |               |
| Parameter                | Units   | Result      | Conc. | Result | % Rec | Limits | Qualifiers    |
| PCB-1016 (Aroclor 1016)  | ug/kg   | <114        |       | <114   |       |        |               |
| PCB-1221 (Aroclor 1221)  | ug/kg   | <114        |       | <114   |       |        | ا م           |
| PCB-1232 (Aroclor 1232)  | ug/kg   | <114        |       | <114   |       | )      | Lete!         |
| PCB-1242 (Aroclor 1242)  | ug/kg   | <114        | 249   | 340J   | 136   | 70-130 | M1            |
| PCB-1248 (Aroclor 1248)  | ug/kg   | 1170        |       | 1100   |       |        | Tefel<br>Foin |
| PCB-1254 (Arodor 1254)   | ug/kg   | 1690        |       | 1390   |       |        | to.           |
| PCB-1260 (Aroclor 1260)  | ug/kg   | 970         |       | 762    |       |        | - · T         |
| Decachlorobiphenyl (S)   | %       |             |       |        | 101   | 60-140 | for 1         |
| Tetrachloro-m-xylene (S) | %       |             |       |        | 79    | 60-140 |               |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

#### REPORT OF LABORATORY ANALYSIS

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#### **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40151542

| SAMPLE DUPLICATE: 1652259 |       |             |        |     |     |            |
|---------------------------|-------|-------------|--------|-----|-----|------------|
|                           |       | 40151542004 | Dup    |     | Max |            |
| Parameter                 | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)   | ug/kg | <114        | <114   |     | 40  |            |
| PCB-1221 (Aroclor 1221)   | ug/kg | <114        | <114   |     | 40  |            |
| PCB-1232 (Aroclor 1232)   | ug/kg | <114        | <114   |     | 40  |            |
| PCB-1242 (Aroclor 1242)   | ug/kg | <114        | <114   |     | 40  |            |
| PCB-1248 (Aroclor 1248)   | ug/kg | 1170        | 888    | 28  | 40  |            |
| PCB-1254 (Aroclor 1254)   | ug/kg | 1690        | 1270   | 28  | 40  |            |
| PCB-1260 (Aroclor 1260)   | ug/kg | 970         | 708    | 31  | 40  |            |
| Decachlorobiphenyl (S)    | %     | 105         | 99     | 6   |     |            |
| Tetrachloro-m-xylene (S)  | %     | 76          | 74     | 3   |     |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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#### QUALITY CONTROL DATA

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

QC Batch:

281922

Analysis Method:

Pace Lipid

QC Batch Method:

Pace Lipid

Analysis Description:

LIPID

Associated Lab Samples:

40151542001, 40151542002, 40151542003, 40151542004, 40151542005, 40151542006

METHOD BLANK: 1652270 Associated Lab Samples:

40151542001, 40151542002, 40151542003, 40151542004, 40151542005, 40151542006

< 0.030

Matrix: Tissue

Blank

Reporting

Parameter

Parameter

Units Result Limit

MDL Analyzed 0.030 02/27/18 07:05

MS

Qualifiers

MATRIX SPIKE SAMPLE:

1682421

Units

%

%

%

40151542004 Result

Spike Conc.

0.030

MS Result

% Rec % Rec Limits

Lipid

Lipid

Lipid

0.38

0.32

Qualifiers

SAMPLE DUPLICATE: 1652271

40151542004 Parameter Units Result

0.38

Dup Result 0.35

RPD 6

Max RPD 40

Qualifiers

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### PCB - FORM III SVOA-1 TISSUE SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Green Bay

Date Extracted: 02/27/2018

Instrument: 40GCSJ

Parent Sample ID: TD3-170612-01-SMB-03

Matrix Spike - Sample No: 1652258MS

Date Analyzed (1): 02/28/2018

Lab File ID: 022818.B\022818007.D

SDG No.: 40151542

| COMPOUND                | SPIKE ADDED<br>(ug/kg) | SAMPLE<br>CONCENTRATION (ug/kg) | MS CONCENTRATION (ug/kg) | MS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|------------------------|---------------------------------|--------------------------|---------|----------------------|
| PCB-1242 (Aroclor 1242) | 249 🗸                  | <114                            | 340J 🗸                   | 136     | 70-130               |

115

No goal

A

90%

Tefer to attached spreadsheet

for re-calc

Spike Recovery: \_1\_ out of \_1\_ outside limits.

Sample

TD3-170612-01-SMB-03

**Wt** = 9.991

**DF** = 10

|       |        | Area   | Avg CF      | On Column       | Peak Result                | Aroclor Result          |
|-------|--------|--------|-------------|-----------------|----------------------------|-------------------------|
| A1242 | PCB-6  | 16403  | 2277537.500 | 0.01            | 36                         | <b>115</b> ug/kg        |
|       | PCB-7  | 47969  | 2324921.950 | 0.02            | 103                        |                         |
|       | PCB-8  | 190125 | 6167947.200 | 0.03            | 154                        |                         |
|       | PCB-9  | 59014  | 2659915.350 | 0.02            | 111                        |                         |
|       | PCB-10 | 62055  | 1808131.700 | 0.03            | 172                        |                         |
|       |        |        |             |                 |                            |                         |
|       |        |        |             | (Area / Avg CF) | (On Column * DF * 5000/Wt) | (Avg of 5 Peak Results) |

## Recalc MS %Rec

Spike Added 249 ug/kg Sample Conc. 115 ug/kg MS Conc. 340 ug/kg

MS %Rec **90**%

# SAMPLE NO.

### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

| <br> |  |
|------|--|
| DUP  |  |

| Lab Name: Pac     | e Analytical - Green Bay               | Contract: HUDSON RIVER REMEDIAL ACTION M |  |  |  |  |  |  |
|-------------------|--|--|--|--|--|--|--|--|
| Date Received:    | 06/13/2017 09:30                       | Matrix: Tissue SDG No.: 40151542         |  |  |  |  |  |  |
| Date Extracted:   | 02/27/2018 06:56                       | Lab Sample ID: 1652259                   |  |  |  |  |  |  |
| Date Analyzed:    | 02/28/2018 09:38                       | Lab File ID: 022818.B\022818008.D        |  |  |  |  |  |  |
| Initial wt/vol: 1 | 0.0075 Final wt/vol: 5 mL Dilution: 10 | Instrument: 40GCSJ Percent Moisture:     |  |  |  |  |  |  |
| CAS NO.           | COMPOUND                               | CONCENTRATION UNITS: ug/kg               |  |  |  |  |  |  |
| 12674-11-2        | PCB-1016 (Aroclor 1016)                | <114 U                                   |  |  |  |  |  |  |
| 11104-28-2        | PCB-1221 (Aroclor 1221)                | <114 U                                   |  |  |  |  |  |  |
| 11141-16-5        | PCB-1232 (Aroclor 1232)                | <114 U                                   |  |  |  |  |  |  |
| 53469-21-9        | PCB-1242 (Aroclor 1242)                | <114 U                                   |  |  |  |  |  |  |
| 12672-29-6        | PCB-1248 (Aroclor 1248)                | 888                                      |  |  |  |  |  |  |
| 11097-69-1        | PCB-1254 (Aroclor 1254)                | 1270                                     |  |  |  |  |  |  |
| 11096-82-5        | PCB-1260 (Aroclor 1260)                | 708                                      |  |  |  |  |  |  |

# PCB - FORM III SVOA-1 TISSUE SEMI-VOLATILE SAMPLE/DUPLICATE RECOVERY

Lab Name: Pace Analytical - Green Bay

Date Extracted: 02/27/2018

Instrument 40GCSJ

Lab Sample ID: TD3-170612-01-SMB-03

Duplicate Sample No: 40151542004DUP

Date Analyzed: 02/28/2018

Lab File ID: 022818.B\022818008.D

SDG No.: 40151542

| COMPOUND                | SAMPLE<br>CONCENTRATION (ug/kg) | DUPLICATE<br>CONCENTRATION (ug/kg) | RPD | RPD<br>LIMITS |
|-------------------------|---------------------------------|------------------------------------|-----|---------------|
| PCB-1016 (Aroclor 1016) | <114                            | <114                               |     | 0-40          |
| PCB-1221 (Aroclor 1221) | <114                            | <114                               |     | 0-40          |
| PCB-1232 (Aroclor 1232) | <114                            | <114                               |     | 0-40          |
| PCB-1242 (Aroclor 1242) | <114                            | <114                               |     | 0-40          |
| PCB-1248 (Aroclor 1248) | 1170                            | 888                                | 28  | 0-40          |
| PCB-1254 (Aroclor 1254) | 1690                            | 1270                               | 28  | 0-40          |
| PCB-1260 (Aroclor 1260) | 970                             | 708                                | 31  | 0-40          |

# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analytic | al - Gre | en Bay Ir        | nstrument ID:       | 40GCSJ              | _GC Columr          | n: <u>Col 1</u> S   | DG No.: <u>401</u> | 51542 |
|-------------------------|----------|------------------|---------------------|---------------------|---------------------|---------------------|--------------------|-------|
| Calibration Date(s):    | 2/01/20  | 18 02/01         | /2018               | (                   | Calibration Ti      | me(s):              | 15:41              | 23:12 |
| LAB FILE ID             |          |                  |                     |                     |                     |                     |                    |       |
| CAL1A = 020118.B\020    | 118058.D | CAL1             | IB = 02011          | 8.B\020118022       | 2.DC                | AL1C = 020          | )118.B\0201180     | 146.D |
| CAL1D = 020118.B\020    | 118034.D | CAL1             | IF = 02011          | 8.B\020118010       | D.D C               | AL2A = 020          | 118.B\0201180      | 160.D |
| CAL2B = 020118.B\020    | 118024.D | CAL2             | 2C = 02011          | 8.B\020118048       | 3.D C               | AL2D = 020          | 118.B\0201180      | 36.D  |
| CAL2F = 020118.B\020    | 118012.D | CAL              | BA = 02011          | 8.B\020118062       | 2.D C               | AL3B = 020          | 118.B\0201180      | 26.D  |
| CAL3C = 020118.B\020    | 118050.D | CAL              | BD = 02011          | 8.B\020118038       | 3.D C               | AL3F = 020          | 118.B\0201180      | 14.D  |
| CAL4A = 020118.B\0201   | 118064.D | CAL <sup>2</sup> | 4B = 02011          | 8.B\020118028       | 3.D C               | AL4C = 020          | 118.B\0201180      | 52.D  |
| CAL4D = 020118.B\020    | 118040.D | CAL <sup>2</sup> | F = 02011           | 8.B\020118016       | 5.D C               | AL5A = 020          | 118.B\0201180      | 966.D |
| CAL5B = 020118.B\0201   | 118030.D | CAL              | 5C = 02011          | 8.B\020118054       | 4.D C               | AL5D = 020          | 118.B\0201180      | 142.D |
| CAL5F = 020118.B\0201   | 118018.D | )                |                     |                     |                     |                     |                    |       |
| COMPOUND                | PEAK     | CURVE TYPE       | CAL1                | CAL2                | CAL3                | CAL4                | CAL5               |       |
| Aroclor 1016            | 1        | Averaged         | 3112820.00          | 3035205.00          | 2823956.00          | 2753003.75          | 2631720.00         |       |
| Aroclor 1016            | 2        | Averaged         | 3106710.00          | 3071580.00          | 2921966.00          | 2846087.50          | 2730766.00         |       |
| Aroclor 1016            | 3        | Averaged         | 8627130.00          | 8305855.00          | 7656058.00          | 7520760.00          | 7263295.00         |       |
| Aroclor 1016            | 4        | Averaged         | 3704150.00          | 3547525.00          | 3348500.00          | 3252068.75          | 3143002.00         |       |
| Aroclor 1016            | 5        | Averaged         | 2670070.00          | 2361535.00          | 2302366.00          | 2263647.50          | 2169966.00         |       |
| Aroclor 1221            | 1        | Averaged         | 1031960.00          | 1015315.00          | 927998.000          | 926320.000          | 913905.000         |       |
| Aroclor 1221            | 2        | Averaged         | 596050.000          | 552110.000          | 486900.000          | 478000.000          | 484272.000         |       |
| Aroclor 1221            | 3        | Averaged         | 1328850.00          | 1283830.00          | 1176426.00          | 1177777.50          | 1178222.00         |       |
| Aroclor 1221            | 4        | Averaged         | 1031060.00          | 984650.000          | 922020.000          | 955875.000          | 988893.000         |       |
| Aroclor 1221            | 5        | Averaged         | 2990830.00          | 3026875.00          | 2769790.00          | <b>/</b> 2699886.25 | 2659407.00         |       |
| Aroclor 1242            | 1        | Averaged         | 2496650.00          | 2404925.00          | 2256810.00          | 2146952.50          | 2082350.00         |       |
| Aroclor 1242            | 2        | Averaged         | 2556240.00          | 2411775.00          | 2299060.00          | 2201033.75          | 2156501.00         |       |
| Aroclor 1242            | 3        | Averaged         | 6828190.00          | 6545905.00          | 6057818.00          | 5754695.00          | 5653128.00         |       |
| Aroclor 1242            | 4        | Averaged         | 2917540.00          | 2792805.00          | 2638632.00          | 2499963.75          | 2450636.00         |       |
| Aroclor 1242            | 5        | Averaged         | 1979500.00 🗸        | 1863835.00          | 1808618.00          | 1708582.50          | 1680123.00         |       |
| Aroclor 1248            | 1        | Averaged         | 2243540.00          | 2215370.00          | 2071386.00          | 1957437.50          | 1928345.00         |       |
| Aroclor 1248            | 2        | Averaged         | 4030970.00          | 3970655.00          | <b>/</b> 3618092.00 | 3450820.00          | 3402973.00         |       |
| Aroclor 1248            | 3        | Averaged         | 1853380.00          | 1817205.00          | 1743642.00          | 1672420.00          | 1649135.00         |       |
| Aroclor 1248            | 4        | Averaged         | 4691680.00          | 4682375.00          | 4327990.00          | 4090952.50          | 4022376.00         |       |
| Aroclor 1248            | 5        | Averaged         | 3292260.00          | 3266350.00          | 3068674.00          | 2924240.00          | 2903514.00         |       |
| Aroclor 1254            | 1        | Averaged         | 5106390.00          | 4976805.00          | 4588838.00          | 4250575.00          | 4211464.00         |       |
| Aroclor 1254            | 2        | Averaged         | 4055710.00          | 4041050.00          | 3860250.00          | 3577445.00          | 3574029.00         | ,     |
| Aroclor 1254            | 3        | Averaged         | 7578410.00          | 7306955.00          | 6801510.00          | 6327833.75          | 6298505.00 •       |       |
| Aroclor 1254            | 4        | Averaged         | 4543960.00          | 4504220.00          | 4327584.00          | 4062911.25          | 4043877.00         | ,     |
| Aroclor 1254            | 5        | Averaged         | 6214000.00 <b>v</b> | 6096090.00 <b>\</b> | 5724416.00          | 5311281.25          | 5273367.00 🛭       | /     |
| Aroclor 1260            | 1        | Averaged         | 8783980.00          | 8307575.00          | <b>/</b> 7717164.00 | 7,551110.00         | 7326194.00         |       |
| Aroclor 1260            | 2        | Averaged         | 9909500.00          | 9319745.00          | 8692030.00          | 8545378.75          | 8275584.00         |       |
| Aroclor 1260            | 3        | Averaged         | 4684670.00          | 4550785.00          | 4253564.00          | 4183218.75          | 4062599.00         |       |
| Aroclor 1260            | 4        | Averaged         | 2946020.00          | 2789825.00          | 2684390.00          | 2569060.00 ₩        | 2494518.00         |       |

## PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name:          | ab Name: Pace Analytical - Green Bay Instrument ID: 40GCSJ GC Column: Col 1 SDG No.: 40151542 |            |               |                 |            |                   |               |             |                      |                      |       |
|--------------------|---|------------|---------------|-----------------|------------|-------------------|---------------|-------------|----------------------|----------------------|-------|
| Calibration        | Date(s):  | 2/01/20    | 18 02/01      | /2018           |            | (                 | Calibration 3 | Time(s):    |                      | 15:41                | 23:12 |
| LAB FILE           | ID  |            |               |                 |            |                   |               |             |                      |                      |       |
| CAL1A =            | 020118.B\0201   | 18058.D    | CAL           | CAL1B =02011    |            | 118.B\020118022.D |               | CAL1C =     | 020118.B\020118046.D |                      | )46.D |
| CAL1D =            | 020118.B\0201   | 18034.D    | CAL           | 1F = <u>0</u> 2 | 2011       | 8.B\020118010     | ).D           | CAL2A =     | 020                  | 118.B\0201180        | 060.D |
| CAL2B =            | CAL2B = 020118.B\020118024.D  |            |               | 2C = <u>0</u> 2 | 2011       | 8.B\020118048     | 3.D           | CAL2D =     | 020                  | 118.B\0201180        | )36.D |
| CAL2F =            | CAL2F = 020118.B\020118012.D  |            |               | CAL3A = 0201    |            | 18.B\020118062.D  |               | CAL3B = 020 |                      | 020118.B\020118026.D |       |
| CAL3C =            | 020118.B\0201   | 18050.D    | CAL           | 3D = <u>02</u>  | 2011       | 8.B\020118038     | 3.D (         | CAL3F =     | 020                  | 118.B\0201180        | )14.D |
| CAL4A =            | 020118.B\0201   | 18064.D    | CAL           | 4B = <u>02</u>  | 20118      | 8.B\020118028     | 3.D (         | CAL4C =     | 020                  | 118.B\0201180        | )52.D |
| CAL4D =            | 020118.B\0201   | 18040.D    | CAL           | CAL4F = 02011   |            | 18.B\020118016.D  |               | CAL5A =     | 020                  | 118.B\020118(        | 066.D |
| CAL5B =            | 020118.B\0201   | 18030.D    | CALS          | CAL5C = 02011   |            | 118.B\020118054.D |               | CAL5D = 020 |                      | 020118.B\020118042.D |       |
| CAL5F =            | 020118.B\0201   | 18018.D    |               |                 |            |                   |               |             |                      |                      |       |
| COMPOUND PEAK CURV |   | CURVE TYPE | CAL1          |                 | CAL2       | CAL3              | CAL           | 4           | CAL5                 |                      |       |
| Aroclor 1260 5 Ave |   | Averaged   | ed 2539920.00 |                 | 2482475.00 | 2379902.00        | 2312086       | 5.25        | 2230817.00           |                      |       |
| Decachlor          | obiphenyl (S)   |            | Averaged      | aged 113048100. |            | 102127550.        | 94496520.0    | 9029641     | 10.0                 | 86559600.0           |       |
|                    |   |            | Averaged      | 1325032         | 00.        | 127252550.        | 123927060     | . 1226956   | 30.                  | 120000440.           |       |

# PCB - FORM VI SVOA-3 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analytic | al - Gre | en Bay In  | strument ID: | 40GCSJ        | GC Colu     | mn: Col 1 | SDG No.:     | 40151542 |
|-------------------------|----------|------------|--------------|---------------|-------------|-----------|--------------|----------|
| Calibration Date(s):    | 2/01/20  | 18 02/01/  | 2018         |               | Calibration | Time(s):  | 15:41        | 23:12    |
| LAB FILE ID             |          |            |              |               |             |           |              |          |
| CAL1A = 020118.B\0201   | 118058.D | CAL1       | B = 02011    | 8.B\02011802  | 2.D         | CAL1C =   | 020118.B\020 | 118046.D |
| CAL1D = 020118.B\0201   | 118034.D | CAL1       | F = 02011    | 8.B\020118010 | 0.D         | CAL2A =   | 020118.B\020 | 118060.D |
| CAL2B = 020118.B\0201   | 118024.D | CAL2       | C = 02011    | 8.B\020118048 | 8.D         | CAL2D =   | 020118.B\020 | 118036.D |
| CAL2F = 020118.B\0201   | 118012.D | CAL3       | A = 02011    | 8.B\020118062 | 2.D         | CAL3B =   | 020118.B\020 | 118026.D |
| CAL3C = 020118.B\0201   |          |            |              | 8.B\02011803  |             | CAL3F =   | 020118.B\020 |          |
| CAL4A = 020118.B\0201   | 118064.D | CAL4       | B = 02011    | 8.B\020118028 | 8.D         | CAL4C =   | 020118.B\020 | 118052.D |
| CAL4D = 020118.B\0201   | 118040.D | CAL4       | F = 02011    | 8.B\020118016 | 3.D         | CAL5A =   | 020118.B\020 | 118066.D |
| CAL5B = 020118.B\0201   | 118030.D | CAL5       | C = 02011    | 8.B\020118054 | 4.D         | CAL5D =   | 020118.B\020 | 118042.D |
| CAL5F = 020118.B\0201   | 118018.D |            |              |               |             |           |              |          |
| COMPOUND                | PEAK     | CURVE TYPE | %RSD         | R2            | A1          | A2        | A3           |          |
| Aroclor 1016            | 1        | Averaged   | 6.93         |               |             | 2871340   | 0.95         |          |
| Aroclor 1016            | 2        | Averaged   | 5.33         |               |             | 293542    | 1.90         |          |
| Aroclor 1016            | 3        | Averaged   | 7.23         |               |             | 7874619   | 9.60         |          |
| Aroclor 1016            | 4        | Averaged   | 6.65         |               |             | 339904    | 9.15         |          |
| Aroclor 1016            | 5        | Averaged   | 8.08         |               |             | 2353510   | 6.90         |          |
| Aroclor 1221            | 1        | Averaged   | 5.79         |               |             | 963099    | 0.60         |          |
| Aroclor 1221            | 2        | Averaged   | 10.07        |               |             | 519466    | 5.40         |          |
| Aroclor 1221            | 3        | Averaged   | 5.88         |               |             | 122902    | 1.10         |          |
| Aroclor 1221            | 4        | Averaged   | 4.15         |               |             | 976499    | 0.60         |          |
| Aroclor 1221            | 5        | Averaged   | 5.97         |               |             | 282935    | 7.65         |          |
| Aroclor 1242            | 1        | Averaged   | 7.59         |               |             | 227753    | 7.50         |          |
| Aroclor 1242            | 2        | Averaged   | 6.98         |               |             | 232492    | 1.95         |          |
| Aroclor 1242            | 3        | Averaged   | 8.21         |               |             | 616794    | 7.20         |          |
| Aroclor 1242            | 4        | Averaged   | 7.37         |               |             | 265991    | 5.35         |          |
| Aroclor 1242            | 5        | Averaged   | 6.70         |               |             | 180813    | 1.70         |          |
| Aroclor 1248            | 1        | Averaged   | 6.91         |               |             | 208321    | 5.70         |          |
| Aroclor 1248            | 2        | Averaged   | 7.88         |               |             | 3694702   | 2.00         |          |
| Aroclor 1248            | 3        | Averaged   | 5.07         |               |             | 1747156   | 6.40         |          |
| Aroclor 1248            | 4        | Averaged   | 7.25         |               |             | 436307    | 4.70         |          |
| Aroclor 1248            | 5        | Averaged   | 5.93         |               |             | 309100    | 7.60         |          |
| Aroclor 1254            | 1        | Averaged   | 8.83 🔥       |               |             | 4626814   | 4.40         |          |
| Aroclor 1254            | 2        | Averaged   | 6.21         |               |             | 3821696   | 6.80         |          |
| Aroclor 1254            | 3        | Averaged   | 8.36         |               |             | 686264    | 2.75         |          |
| Aroclor 1254            | 4        | Averaged   | 5.50         | /             |             | 4296510   | 0.45         |          |
| Aroclor 1254            | 5        | Averaged   | 7.57         |               |             | 5723830   | 0.85         |          |
| Aroclor 1260            | 1        | Averaged   | 7.51         |               |             | 793720    | 4.60         |          |
| Aroclor 1260            | 2        | Averaged   | 7.37         |               |             | 894844    | 7.55         |          |
| Aroclor 1260            | 3        | Averaged   | 5.99         |               |             | 434696    | 7.35         |          |
| Aroclor 1260            | 4        | Averaged   | 6.63         |               |             | 2696762   | 2.60         |          |

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

04/27/2018 8:03

# PCB - FORM VI SVOA-4 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name                     | : Pace Analytic | al - Gre   | en Bay   | Instrument       | t ID: | 40GCSJ              | _GC Colu    | mn: Col 1 | S                | DG No.: 401          | 51542 |
|------------------------------|-----------------|------------|----------|------------------|-------|---------------------|-------------|-----------|------------------|----------------------|-------|
| Calibration                  | Date(s):        | 02/01/20   | 18 02/0  | 1/2018           |       | (                   | Calibration | Time(s):  |                  | 15:41                | 23:12 |
| LAB FILE                     | ID              |            |          |                  |       |                     |             |           |                  |                      |       |
| CAL1A =                      | 020118.B\020    | 118058.E   | CAI      | _ CAL1B =020     |       | 8.B\020118022       | 2.D         | CAL1C =   | 020              | 020118.B\020118046.D |       |
| CAL1D = 020118.B\020118034.D |                 |            | CAL      | .1F = <u>0</u> 2 | 2011  | 8.B\020118010       | ).D         | CAL2A =   | 020              | 0118.B\020118        | 060.D |
| CAL2B = 020118.B\020118024.D |                 |            | CAL      | .2C = 02         | 2011  | 8.B\020118048       | 3.D         | CAL2D =   | 020              | 020118.B\020118036.D |       |
| CAL2F = 020118.B\020118012.D |                 |            | CAL      | CAL3A = 02011    |       | 118.B\020118062.D   |             | CAL3B =   | 020118.B\0201180 |                      | 026.D |
| CAL3C =                      | 020118.B\020    | 118050.D   | CAL      | _ CAL3D =02011   |       | 8.B\020118038       | 3.D         | CAL3F =   | 020              | )118.B\020118        | 014.D |
| CAL4A =                      | 020118.B\020    | 118064.    | CAL      | .4B = <u>0</u> 2 | 2011  | 8.B\020118028       | 3.D         | CAL4C =   | 020              | 0118.B\020118        | 052.D |
| CAL4D =                      | 020118.B\020    | 118040.E   | CAL      | CAL4F = 02011    |       | 0118.B\020118016.D  |             | CAL5A =   | 020              | 0118.B\020118        | 066.D |
| CAL5B =                      | 020118.B\020    | 118030.E   | CAL      | CAL5C = 02011    |       | 20118.B\020118054.D |             | CAL5D =   | 020              | )118.B\020118        | 042.D |
| CAL5F =                      | 020118.B\020    | 118018.E   | )        |                  |       |                     |             |           |                  | ,                    | 7     |
| COMPOUND PEAK CURVE          |                 | CURVE TYPE | %RSE     | )                | R2    | A1                  | A           | 2         | A3               |                      |       |
| Aroclor 12                   | 60              | 5          | Averaged | aged 5.23        |       |                     |             | 23890     | 40.05            |                      |       |
| Decachlor                    | obiphenyl (S)   |            | Averaged | 10.82            | 2 🔎   |                     |             | 973056    | 36.00            |                      | 1     |
| Tetrachloro-m-xylene Ave     |                 |            | Averaged | 3.83             |       |                     |             | 125275    | 776.0            |                      | 1     |



# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name: Pace Analytic      | al - Gree | en Bay | Instrume | ent ID: 40G0 | CSJGC     | C Column:    | Col 1  | _SDG No.: 4    | 0151542 |
|------------------------------|-----------|--------|----------|--------------|-----------|--------------|--------|----------------|---------|
| Calibration Date(s):         | 02/01/20  | 18 02/ | 01/2018  | _            | Calib     | oration Time | e(s):  | 15:41          | 23:12   |
| LAB FILE ID                  |           |        |          |              |           |              |        |                |         |
| CAL1A = 020118.B\020         | 118058.D  | CA     | AL1B =   | 020118.B\020 | 0118022.D | CAL          | 1C = 0 | )20118.B\02011 | 18046.D |
| CAL1D = 020118.B\020         |           |        | \L1F =   | 020118.B\020 |           |              | -      | )20118.B\02011 |         |
| CAL2B = 020118.B\020         | •         |        | AL2C =   | 020118.B\020 |           |              | _      | )20118.B\02011 |         |
| CAL2F = 020118.B\020         | 118012.D  |        | AL3A =   | 020118.B\020 |           |              | _      | )20118.B\02011 |         |
| CAL3C = 020118.B\020         |           |        | AL3D =   | 020118.B\020 |           | CAL          | _      | )20118.B\02011 |         |
| CAL4A = 020118.B\020         |           |        | AL4B =   | 020118.B\020 |           |              | -      | )20118.B\02011 |         |
| CAL4D = 020118.B\020         |           |        | AL4F =   | 020118.B\020 |           | CAL          | _      | )20118.B\02011 |         |
| CAL5B = 020118.B\020118030.D |           |        |          |              |           |              |        |                |         |
| CAL5F = 020118.B\020         |           |        |          |              |           |              |        |                |         |
| COMPOUND                     | PEAK      | CAL1   | CAL2     | CALS         | CAL4      | CAL5         | RT     | RT WI          | NDOW    |
| COMI COND                    | FLAR      | OALI   | UALZ     | CAL3         | UAL4      | CALS         | l Ni   | FROM           | ТО      |
| Aroclor 1016                 | 1         | 3.317  | 3.318    | 3.317        | 3.317     | 3.317        | 3.317  | 3.283          | 3.351   |
| Aroclor 1016                 | 2         | 3.512  | 3.512    | 3.513        | 3.514     | 3.513        | 3.512  | 3.478          | 3.546   |
| Aroclor 1016                 | 3         | 3.826  | 3.826    | 3.826        | 3.827     | 3.826        | 3.827  | 3.793          | 3.861   |
| Aroclor 1016                 | 4         | 3.928  | 3.928    | 3.929        | 3.928     | 3.928        | 3.928  | 3.894          | 3.962   |
| Aroclor 1016                 | 5         | 3.994  | 3.993    | 3.994        | 3.993     | 3.994        | 3.993  | 3.959          | 4.027   |
| Aroclor 1221                 | 1         | 1.804  | 1.804    | 1.805        | 1.805     | 1.804        | 1.804  | 1.77           | 1.838   |
| Aroclor 1221                 | 2         | 2.407  | 2.407    | 2.408        | 2.406     | 2.406        | 2.407  | 2.373          | 2.441   |
| Aroclor 1221                 | 3         | 2.689  | 2.688    | 2.689        | 2.688     | 2.687        | 2.688  | 2.654          | 2.722   |
| Aroclor 1221                 | 4         | 2.789  | 2.789    | 2.79         | 2.789     | 2.789        | 2.789  | 2.755          | 2.823   |
| Aroclor 1221                 | 5         | 2.852  | 2.851    | 2.852        | 2.851     | 2.85         | 2.851  | 2.817          | 2.885   |
| Aroclor 1242                 | 1         | 3.317  | 3.317    | 3.317        | 3.317     | 3.317        | 3.318  | 3.284          | 3.352   |
| Aroclor 1242                 | 2         | 3.514  | 3.515    | 3.514        | 3.512     | 3.513        | 3.513  | 3.479          | 3.547   |
| Aroclor 1242                 | 3         | 3.825  | 3.827    | 3.827        | 3.826     | 3.826        | 3.827  | 3.793          | 3.861   |
| Aroclor 1242                 | 4         | 3.928  | 3.929    | 3.928        | 3.928     | 3.928        | 3.929  | 3.895          | 3.963   |
| Aroclor 1242                 | 5         | 3.994  | 3.994    | 3.994        | 3.994     | 3.994        | 3.993  | 3.959          | 4.027   |
| Aroclor 1248                 | 1         | 4.261  | 4.26     | 4.26         | 4.259     | 4.26         | 4.26   | 4.226          | 4.294   |
| Aroclor 1248                 | 2         | 4.545  | 4.545    | 4.544        | 4.545     | 4.545        | 4.545  | 4.511          | 4.579   |
| Aroclor 1248                 | 3         | 4.814  | 4.812    | 4.812        | 4.812     | 4.812        | 4.812  | 4.778          | 4.846   |
| Aroclor 1248                 | 4         | 4.88   | 4.878    | 4.878        | 4.877     | 4.878        | 4.878  | 4.844          | 4.912   |
| Aroclor 1248                 | 5         | 5.036  | 5.035    | 5.035        | 5.036     | 5.036        | 5.036  | 5.002          | 5.07    |
| Aroclor 1254                 | 1         | 5.161  | 5.161    | 5.161        | 5.161     | 5.162        | 5.161  | 5.127          | 5.195   |
| Aroclor 1254                 | 2         | 5.405  | 5.406    | 5.406        | 5.406     | 5.406        | 5.406  | 5.372          | 5.44    |
| Aroclor 1254                 | 3         | 5.508  | 5.508    | 5.508        | 5.509     | 5.508        | 5.508  | 5.474          | 5.542   |
| Aroclor 1254                 | 4         | 6.026  | 6.024    | 6.025        | 6.025     | 6.025        | 6.025  | 5.991          | 6.059   |
| Aroclor 1254                 | 5         | 6.298  | 6.298    | 6.297        | 6.297     | 6.297        | 6.298  | 6.264          | 6.332   |
| Aroclor 1260                 | 1         | 6.298  | 6.298    | 6.299        | 6.298     | 6.299        | 6.298  | 6.264          | 6.332   |
| Aroclor 1260                 | 2         | 7.004  | 7.004    | 7.004        | 7.004     | 7.003        | 7.003  | 6.969          | 7.037   |
| Aroclor 1260                 | 3         | 7.251  | 7.251    | 7.25         | 7.249     | 7.251        | 7.25   | 7.216          | 7.284   |

# PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name    | : Pace Analytic                  | cal - Gree | en Bay  | Instrume  | ent ID: 40G          | <u>CSJ</u> GC | Column:      | Col 1           | SDG No.: 4   | 0151542 |
|-------------|----------------------------------|------------|---------|-----------|----------------------|---------------|--------------|-----------------|--------------|---------|
| Calibration | Date(s):                         | 02/01/20   | 18 0:   | 2/01/2018 | _                    | Calib         | oration Time | e(s):           | 15:41        | 23:12   |
| LAB FILE    | ID                               |            |         |           |                      |               |              |                 |              |         |
| CAL1A =     | 020118.B\020                     | 118058.D   |         | CAL1B =   | 020118.B\02          | 0118022.D     | CAL          | 1C = <u>0</u> 2 | 20118.B\0201 | 18046.D |
| CAL1D =     | 020118.B\020                     | 118034.D   |         | CAL1F =   | 020118.B\020118010.D |               | CAL          | 2A = <u>0</u> 2 | 20118.B\0201 | 18060.D |
| CAL2B =     | 020118.B\020                     | 118024.D   | (       | CAL2C =   | 020118.B\02          | 0118048.D     | CAL          | 2D = <u>0</u> 2 | 20118.B\0201 | 18036.D |
| CAL2F =     | 2F = <u>020118.B\020118012.D</u> |            |         | CAL3A =   | 020118.B\02          | 0118062.D     | CAL          | 3B = <u>0</u> 2 | 20118.B\0201 | 18026.D |
| CAL3C =     | 3C = 020118.B\020118050.D        |            |         | CAL3D =   | 020118.B\02          | 0118038.D     | 38.D CAL3F = |                 | 20118.B\0201 | 18014.D |
| CAL4A =     |                                  |            |         | CAL4B =   | 020118.B\02          | 0118028.D     | CAL          | 4C = 0          | 20118.B\0201 | 18052.D |
| CAL4D =     | 020118.B\020                     | 118040.D   |         | CAL4F =   | 020118.B\02          | 0118016.D     | CAL          | 5A = <u>0</u> 2 | 20118.B\0201 | 18066.D |
| CAL5B =     | 020118.B\020                     | 118030.D   |         | CAL5C =   | 020118.B\02          | 0118054.D     | CAL          | 5D = <u>0</u> 2 | 20118.B\0201 | 18042.D |
| CAL5F =     | 020118.B\020                     | 118018.D   |         |           |                      |               |              |                 |              |         |
| 001         | ADOUND                           | DEAK       | C A L 4 | CALO      | CALA                 | CALA          | CALE         | DT              | RT W         | INDOW   |
| COI         | MPOUND                           | PEAK       | CAL1    | CAL2      | CAL3                 | CAL4          | CAL5         | RT              | FROM         | ТО      |
| Aroclor 12  | Aroclor 1260 4 7.4               |            | 7.442   | 7.442     | 7.442                | 7.441         | 7.442        | 7.441           | 7.407        | 7.475   |
| Aroclor 12  |                                  |            | 7.899   | 7.899     | 7.9                  | 7.899         | 7.899        | 7.899           | 7.865        | 7.933   |
| Decachlo    | obiphenyl (S)                    |            | 8.569   | 8.569     | 8.57                 | 8.569         | 8.569        | 8.569           | 8.535        | 8.603   |
| Tetrachlor  | o-m-xylene                       |            | 2.484   | 2.484     | 2.485                | 2.484         | 2.484        | 2.483           | 2.449        | 2.517   |

# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION DATA (SINGLE POINT)

| Lab Name: Pace Analytical - Green Bay | Instrument ID: 400 | GCSJ GC Column: Col 1 | SDG No.: 40151542 |
|---------------------------------------|--------------------|-----------------------|-------------------|
| Calibration Date(s): 02/01/2018       |                    | Calibration Time(s):  | 15:24             |
| LAB FILE ID                           |                    |                       |                   |
| CAL3S = 020118.B\020118008.D          |                    |                       |                   |

| COMPOLIND    | ANACHINIT | DEAK | DT    | RT WII | NDOW  | RESPONSE   |   |
|--------------|-----------|------|-------|--------|-------|------------|---|
| COMPOUND     | AMOUNT    | PEAK | RT    | FROM   | TO    | FACTOR     |   |
| Aroclor 1232 | .5        | 1    | 2.851 | 2.817  | 2.885 | 2153886.00 |   |
| Aroclor 1232 | .5        | 2    | 3.514 | 3.48   | 3.548 | 1204648.00 |   |
| Aroclor 1232 | .5        | 3    | 3.826 | 3.792  | 3.86  | 3158628.00 | ~ |
| Aroclor 1232 | .5        | 4    | 3.929 | 3.895  | 3.963 | 1353756.00 |   |
| Aroclor 1232 | .5        | 5    | 3.995 | 3.961  | 4.029 | 908220.000 |   |

|                  | Document Name:               | Document Revised:             |
|------------------|------------------------------|-------------------------------|
| Pace Analytical" | PCB Calibration Low Standard | 23-Apr-2018                   |
| / doos mary nour | Document No.:                | Issuing Authority:            |
|                  | F-GB-O-155-Rev.00            | Pace Green Bay Quality Office |

# **PCB Low Level Calibration % Difference Check**

Lab Name: Pace Analytical - Green Bay
Instrument ID: 40GCSJ
Calibration Date: 2/1/2018

|             |                      | Abundance     |              | Acceptance |           |
|-------------|----------------------|---------------|--------------|------------|-----------|
| Aroclor     | True Value           | Concentration | % Difference | Criteria % | Pass/Fail |
| AR1221-CAL1 | .1.                  | 0.108262      | 8.262        | 20         | Pass      |
| AR1242-CAL1 | .1                   | 0.109888      | 9.888        | 20         | Pass      |
| AR1248-CAL1 | .1                   | 0,107384      | 7.384        | 20         | Pass      |
| AR1254-CAL1 | 48 11.1              | 0.108248      | 8.248        | 20         | Pass      |
| AR1016-CAL1 | 2010 1111 1 <b>1</b> | 0.108778      | 8.778        | 20         | Pass      |
| AR1260-CAL1 | 1.1                  | 0,108477      | 8.477        | 20         | Pass      |



### SAMPLE NO.

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10754812ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 02/01/2018 Time: 23:44

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 02/01/2018

02/01/2018

Lab File ID: 020118.B\020118070.D

Init. Calib. Time(s): 15:24

23:12

SDG No.: 40151542

| COMPOUND               | PEAK | CURVE    | RT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAR | CORVE    | KI    | FROM  | ТО    | Amount     | Amount     | 700     |
| Aroclor 1221           | 1    | Averaged | 1.804 | 1.77  | 1.838 | 963099.600 | 1022348.00 | 6.1518  |
| Aroclor 1221           | 2    | Averaged | 2.407 | 2.373 | 2.441 | 519466.400 | 536104.000 | 3.2028  |
| Aroclor 1221           | 3    | Averaged | 2.687 | 2.654 | 2.722 | 1229021.10 | 1328382.00 | 8.0846  |
| Aroclor 1221           | 4    | Averaged | 2.788 | 2.755 | 2.823 | 976499.600 | 1033122.00 | 5.7985  |
| Aroclor 1221           | 5    | Averaged | 2.851 | 2.817 | 2.885 | 2829357.65 | 3121002.00 | 10.3078 |
| Decachlorobiphenyl (S) |      | Averaged | 8.569 | 8.535 | 8.603 | 97305636.0 | 93031780.0 | -4.3922 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.449 | 2.517 | 125275776. | 119109420. | -4.9222 |



SAMPLE NO.

10754821ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 02/02/2018 Time: 00:00

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 02/01/2018 02/01/2018

Lab File ID: 020118.B\020118072.D Init. Calib. Time(s): 15:24 23:12

SDG No.: 40151542

| COMPOUND               | PEAK | CURVE    | RT    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D    |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | PEAR | CORVE    | KI    | FROM  | ТО    | Amount     | Amount     | %D      |   |
| Aroclor 1242           | 1    | Averaged | 3.316 | 3.284 | 3.352 | 2277537.50 | 2375878.00 | 4.3178  | 7 |
| Aroclor 1242           | 2    | Averaged | 3.512 | 3.479 | 3.547 | 2324921.95 | 2434742.00 | 4.7236  | 7 |
| Aroclor 1242           | 3    | Averaged | 3.826 | 3.793 | 3.861 | 6167947.20 | 6317432.00 | 2.4236  | 7 |
| Aroclor 1242           | 4    | Averaged | 3.928 | 3.895 | 3.963 | 2659915.35 | 2766716.00 | 4.0152  |   |
| Aroclor 1242           | 5    | Averaged | 3.993 | 3.959 | 4.027 | 1808131.70 | 1885160.00 | 4.2601  | 7 |
| Decachlorobiphenyl (S) |      | Averaged | 8.569 | 8.535 | 8.603 | 97305636.0 | 89495480.0 | -8.0264 | 7 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.449 | 2.517 | 125275776. | 116601180. | -6.9244 |   |



### SAMPLE NO.

# PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10754836ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 02/02/2018 Time: 00:17

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 02/01/2018 02/01/2018

Lab File ID: 020118.B\020118074.D Init. Calib. Time(s): 15:24 23:12

SDG No.: 40151542

| COMPOUND               | PEAK | CURVE    | ΡТ    | RT WI | NDOW  | RRF or     | RRF or     |   | 0/ D    |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---|---------|---|
| COMPOUND               | PEAR | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     |   | %D      |   |
| Aroclor 1248           | 1    | Averaged | 4.26  | 4.226 | 4.294 | 2083215.70 | 2217792.00 | / | 6.4600  | 7 |
| Aroclor 1248           | 2    | Averaged | 4.545 | 4.511 | 4.579 | 3694702.00 | 3901840.00 |   | 5.6064  | 1 |
| Aroclor 1248           | 3    | Averaged | 4.812 | 4.778 | 4.846 | 1747156.40 | 1912408.00 |   | 9.4583  | 7 |
| Aroclor 1248           | 4    | Averaged | 4.878 | 4.844 | 4.912 | 4363074.70 | 4633010.00 |   | 6.1868  | 7 |
| Aroclor 1248           | 5    | Averaged | 5.036 | 5.002 | 5.07  | 3091007.60 | 3341124.00 | / | 8.0917  | 4 |
| Decachlorobiphenyl (S) |      | Averaged | 8.569 | 8.535 | 8.603 | 97305636.0 | 90299100.0 | / | -7.2005 | 7 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.449 | 2.517 | 125275776. | 118230860. | / | -5.6235 |   |



SAMPLE NO.

10754827ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 02/02/2018

Time: 00:33

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 02/01/2018

02/01/2018

Lab File ID: 020118.B\020118076.D

Init. Calib. Time(s): 15:24

23:12

SDG No.: 40151542

| COMPOUND               | PEAK | CURVE    | рт    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D    |        |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|--------|
| COMPOUND               | FEAR | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |        |
| Aroclor 1254           | 1    | Averaged | 5.161 | 5.127 | 5.195 | 4626814.40 | 4367364.00 | -5.6075 | $\neg$ |
| Aroclor 1254           | 2    | Averaged | 5.405 | 5.372 | 5.44  | 3821696.80 | 3639090.00 | -4.7782 | 7      |
| Aroclor 1254           | 3    | Averaged | 5.509 | 5.474 | 5.542 | 6862642.75 | 6286092.00 | -8.4013 | $\neg$ |
| Aroclor 1254           | 4    | Averaged | 6.025 | 5.991 | 6.059 | 4296510.45 | 4052620.00 | -5.6765 | 7      |
| Aroclor 1254           | 5    | Averaged | 6.297 | 6.264 | 6.332 | 5723830.85 | 5593406.00 | -2.2786 |        |
| Decachlorobiphenyl (S) |      | Averaged | 8.569 | 8.535 | 8.603 | 97305636.0 | 90604620.0 | -6.8866 | $\neg$ |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.449 | 2.517 | 125275776. | 119005220. | -5.0054 | 一      |



SAMPLE NO.

10754834ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 02/02/2018 Time: 00:49

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 02/01/2018

02/01/2018

Lab File ID: 020118.B\020118078.D

Init. Calib. Time(s): 15:24

23:12

SDG No.: 40151542

| COMPOUND               | PEAK | CURVE    | RT    | RT WII | MDOM  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|--------|-------|------------|------------|---------|---|
| COMPOUND               | FEAR | CORVE    | KI    | FROM   | TO    | Amount     | Amount     | /00     |   |
| Aroclor 1016           | 1    | Averaged | 3.317 | 3.283  | 3.351 | 2871340.95 | 2945272.00 | 2.5748  | • |
| Aroclor 1016           | 2    | Averaged | 3.513 | 3.478  | 3.546 | 2935421.90 | 3038492.00 | 3.5113  | ` |
| Aroclor 1016           | 3    | Averaged | 3.825 | 3.793  | 3.861 | 7874619.60 | 8030782.00 | 1.9831  | , |
| Aroclor 1016           | 4    | Averaged | 3.927 | 3.894  | 3.962 | 3399049.15 | 3471692.00 | 2.1372  |   |
| Aroclor 1016           | 5    | Averaged | 3.993 | 3.959  | 4.027 | 2353516.90 | 2364606.00 | 0.4712  |   |
| Aroclor 1260           | 1    | Averaged | 6.298 | 6.264  | 6.332 | 7937204.60 | 7517878.00 | -5.2831 | • |
| Aroclor 1260           | 2    | Averaged | 7.003 | 6.969  | 7.037 | 8948447.55 | 9116860.00 | 1.8820  | • |
| Aroclor 1260           | 3    | Averaged | 7.25  | 7.216  | 7.284 | 4346967.35 | 4399648.00 | 1.2119  | 1 |
| Aroclor 1260           | 4    | Averaged | 7.441 | 7.407  | 7.475 | 2696762.60 | 2714840.00 | 0.6703  | • |
| Aroclor 1260           | 5    | Averaged | 7.899 | 7.865  | 7.933 | 2389040.05 | 2560028.00 | 7.1572  | , |
| Decachlorobiphenyl (S) |      | Averaged | 8.568 | 8.535  | 8.603 | 97305636.0 | 92095720.0 | -5.3542 | • |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.449  | 2.517 | 125275776. | 119302920. | -4.7678 |   |

SAMPLE NO.

10739472CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 02/28/2018 Time: 08:23

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 02/01/2018 02/01/2018

Lab File ID: 022818.B\022818004.D Init. Calib. Time(s): 15:24 23:12

SDG No.: 40151542

| COMPOUND               | PEAK | CURVE    | RT    | RT WI | NDOW  | RRF or     | RRF or     | %D              |    |
|------------------------|------|----------|-------|-------|-------|------------|------------|-----------------|----|
| COMPOUND               | FEAR | CORVE    | KI    | FROM  | ТО    | Amount     | Amount     | 70D             |    |
| Aroclor 1248           | 1    | Averaged | 4.262 | 4.226 | 4.294 | 2083215.70 | 2071452.00 | -0.5647         | _  |
| Aroclor 1248           | 2    | Averaged | 4.546 | 4.511 | 4.579 | 3694702.00 | 3574564.00 | /-3.2516        | ć  |
| Aroclor 1248           | 3    | Averaged | 4.813 | 4.778 | 4.846 | 1747156.40 | 1676532.00 | / -4.0422       | _  |
| Aroclor 1248           | 4    | Averaged | 4.878 | 4.844 | 4.912 | 4363074.70 | 4187004.00 | <b>-</b> 4.0355 | _  |
| Aroclor 1248           | 5    | Averaged | 5.037 | 5.002 | 5.07  | 3091007.60 | 2890362.00 | -6.4913         | (  |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.535 | 8.603 | 97305636.0 | 90489700.0 | -7.0047         | -  |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.449 | 2.517 | 125275776. | 109914700. | -12.2618        | -1 |
|                        |      |          |       |       |       |            |            |                 |    |



SAMPLE NO.

10739473CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 02/28/2018 Time: 11:29

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 02/01/2018 02/01/2018

 Lab File ID:
 022818.B\022818015.D
 Init. Calib. Time(s):
 15:24
 23:12

SDG No.: 40151542

| COMPOUND               | DEAK | CLIDVE   | ВТ    | RT WI | NDOW  | RRF or     | RRF or     |         | %D              |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|-----------------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     |         | 70D<br><b>/</b> |   |
| Aroclor 1254           | 1    | Averaged | 5.162 | 5.127 | 5.195 | 4626814.40 | 4863930.00 | 7       | 5.1248          | U |
| Aroclor 1254           | 2    | Averaged | 5.407 | 5.372 | 5.44  | 3821696.80 | 4045504.00 | 7       | 5.8562          |   |
| Aroclor 1254           | 3    | Averaged | 5.51  | 5.474 | 5.542 | 6862642.75 | 7182226.00 | Ζ,      | 4.6569          | J |
| Aroclor 1254           | 4    | Averaged | 6.027 | 5.991 | 6.059 | 4296510.45 | 4533644.00 | V,      | 5.5192          | ٦ |
| Aroclor 1254           | 5    | Averaged | 6.299 | 6.264 | 6.332 | 5723830.85 | 6044152.00 | $V_{/}$ | 5.5963          | J |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.535 | 8.603 | 97305636.0 | 97636860.0 |         | 0.3404          | ų |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.449 | 2.517 | 125275776. | 116134740. |         | -7.2967         | 1 |



# Pace Analytical\* Prep Log Report

#### Batch Information: OEXT 281918 PCB-B

| Prep Method      | EPA 3541         |
|------------------|------------------|
| Spiked By        | AMC              |
| Instrument       | 40BALL           |
| Hexane           | 188917           |
| H2SO4 - Conc.    | 179361           |
| Reviewed By Date | 03/21/2018 09:26 |

| Analysis Method             | EPA 8082A Mod           |
|-----------------------------|-------------------------|
| Spiked By Date/Time         | 02/27/2018 06:56:11:522 |
| Conc. Temp #1               | 40                      |
| Sodium Sulfate              | 186889                  |
| Acid 3665A<br>Date/Initials | 2/27/18 AMC             |
| Batch Notes                 | Hex/Ace 50:50- 187883   |

### Template Version: F-GB-O-113-Rev.03 (19Feb2018)

| Extracted By  | AMC        |
|---------------|------------|
| Witnessed By  | ЕТВ        |
| Conc. Temp #2 | 40         |
| Florisil      | 186910     |
| Tuna          | None Added |
|               |            |

| ,                         |                         |
|---------------------------|-------------------------|
| Extracted Date/Time       | 02/27/2018 06:56:10:458 |
| Witnessed By<br>Date/Time | 02/27/2018 07:49:40:163 |
| Methylene Chloride        | None Added              |
| 3620B Date/Initials       | 2/27/18 AMC             |
| Reviewed By               | BLM                     |
|                           |                         |

### Sample Information:

| . Rule     | Sample Type | ab Sample ID | nitial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)             | AR1242-SPK<br>(mL) |
|------------|-------------|--------------|-------------------|----------------------|--------------------------|--------------|--------------------------|--------------------|
| ပ္မ        | Š           | و            | Ē                 | ĒΕ                   | 98                       | Š            |                          | ₹E                 |
| 8082A TNYP | BLANK       | 1652256      | 10                | 5                    | 3                        |              | 185015<br>(.25)          |                    |
| 8082A TNYP | LCS         | 1652257      | 10                | 5                    | 3                        |              | 185015<br>(.25)          | 182336<br>(.125)   |
| 8082A TNYP | PS          | 40151542001  | 9.9602            | 5                    | 3                        |              | 185015<br>(.25)          | (.120)             |
| 8082A TNYP | PS          | 40151542002  | 9.9707            | 5                    | 3                        |              | 185015<br>(.25)          |                    |
| 8082A TNYP | PS          | 40151542003  | 10.0308           | 5                    | 3                        |              | 185015<br>(.25)          |                    |
| 8082A TNYP | PS          | 40151542004  | 9.9911            | 5                    | 3                        |              | 185015<br>(.25)          |                    |
| 8082A TNYP | MS          | 1652258      | 10.0244           | 5                    | 3                        |              | 185015<br>(.25)          | 182336             |
| 8082A TNYP | DUP         | 1652259      | 10.0075           | 5                    | 3                        |              | 185015                   | (.125)             |
| 8082A TNYP | PS          | 40151542005  | 9.9714            | 5                    | 3                        |              | (.25)<br>185015          |                    |
| 8082A TNYP | PS          | 40151542006  | 10.0093           | 5                    | 3                        |              | (.25)<br>185015<br>(.25) |                    |

#### Standard Notes:

182336: Ar1242 Spike @20ug/mL 40GCS9.

185015: Pest/PCB Surrogate Spike 40GCS7.

Continued from Page \_\_\_\_

|  |             | ***  |             |                    |             |                                       | -       |       | Ī            |              | T       |         |      |      |       |          |        |           |         |   | -    | T    | T   | Ī                |  |   |  |   |   |
|--|-------------|--|-------------|--------------------|-------------|---------------------------------------|---------|-------|--------------|--------------|---------|---------|------|------|-------|----------|--------|-----------|---------|---|------|------|-----|------------------|--|---|--|---|---|
|  |             |  |             |                    | ļ           |                                       |         |       | ļ            |              | ļ       | ļ       | ļ    |      | -     |          | ļ      |           | -       | _ |      | _    |     |                  | -  |   |  |   | Marin Marin or construction of the      |
|  |             |  | Seg         | uen                | ice l       | Name:                                 | C:      | \ms   | sdch         | em\1         | l\se    | quer    | ice\ | 0201 | 18.   | s        |        |           |         |   |      |      |     |                  |  | 1                                       |  |   |   |
|  |             | -  |             | c                  |             | ment:                                 | BI      | M     |              |              |         |         |      |      |       |          |        | 15        |         |   |      |      |     |                  |  |   |  |   |   |
|  |             |  | c+          | Da                 | ta 1        | Path:                                 | C:      | MS    |              |              |         | /AT     | 201  | 18\  |       |          |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             |  | ta A        |                    |             |                                       |         |       |              | q Cm         |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | -                                       |  |   | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
|  |             | In   | stru        | men                | t Co        | ontro.                                | l F     | ost   | -Se          | ar Cm        | ıd:     |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | -                                       |  |   |   |
| <b></b>  |             |  | ta A        |                    |             |                                       |         |       |              | q Cm         |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             |  | Me          | tho                | d Se        | ection                                | 15      | To    | Run          |              |         |         |      |      |       | e Op     |        |           |         |   |      |      |     |                  |  | 4                                       |  |   |   |
|  | 5 Village 1 |  |             |                    |             | Metho<br>cess:                        |         | r On  | 3 v          |              |         |         |      |      |       | , Ir     |        |           |         |   |      |      |     |                  |  | -                                       | Į.   |   |   |
| -  |             | -  |             |                    | *           |                                       | -       |       | -            |              | (       | ) E     | arc  | ode  | Dis   | able     | d      | -         |         |   |      |      |     |                  |  | 1                                       |  |   |   |
|  |             | •  | Lin         | e                  |             |                                       |         |       |              | ampl         |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | -                                       |  |   |   |
|  |             | 1  | ) Rea       |                    | amp<br>file |                                       | 1       |       | rime<br>201  | ≘<br>1800    | 1       |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | *************************************** |  |   |   |
|  |             |  | Me          | eth                | od          |                                       | -       | G     | EBI          | CATC         |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | T                                       |  |   |   |
| <u> </u>   |             |  | ) Sar<br>Da |                    | file        | •                                     | ~       | Ō     |              | 1800         |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             | 3  | Me<br>Rea   |                    | od<br>amp   |                                       | 3       |       | EBI(         | OTA2<br>NE   | 017     |         |      |      |       |          |        |           |         |   |      |      |     |                  |  |   |  |   |   |
|  |             |  | Da          | ata                | file        |                                       | _       | 0     | 2013         | 1800         |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | -                                       |  |   |   |
|  | -           | - 4  | ) Sar       |                    | e           |                                       | 4       | H     | EXA          |              |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | +                                       | -  |   |   |
|  |             |  |             | eta<br>eth         | file<br>od  | <u> </u>                              |         |       |              | 1800<br>TA2  |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | 1                                       |  |   |   |
|  |             | 5  | ) Rea       | ars                | amp         |                                       | 5       | 1.    | 232-         |              | 35,1    | 1855    | 39:1 | ,17  | 400   | , NSA    |        |           |         |   |      |      |     |                  |  | 1780017.040000                          | Acchaecture  |   |   |
| <del> </del>   | -           |  | Me          | eth                |             |                                       |         | G     | EBIC         | TA2          | _       |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | +                                       | -  |   |   |
|  |             | . 6  | San<br>Da   |                    | e<br>file   |                                       | 4       |       | EXAN<br>2011 | 800          | 6       |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | 4                                       |  |   |   |
|  |             | 7  | . Me        | et.h               |             |                                       | -       | G     | EBIC         | TA2          | 017     | 0.01    | 30.1 | 17   | 400   | Ne n     |        |           |         |   |      |      |     |                  |  |   | PARALLE STATE OF THE STATE OF T |   |   |
| <u> </u>   | +           |  | Da          | ata                | file        | r <sup>i</sup>                        | O       | 0.    | 2011         | 800          | 7       | 1 0.0 I | 20.1 | , 1, | 900   | , NSA    |        |           |         |   |      |      |     |                  |  |   |  |   |   |
|  |             | . 8  | Me<br>San   | eth:<br>npl:       |             |                                       | 5       |       |              | CAL          |         | 855     | 39:1 | , 17 | 401   | , NSA    |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             |  |             | ta:                | file        |                                       |         |       |              | 800<br>TA2   |         |         |      |      |       |          |        |           |         |   |      |      |     | r                |  |   |  |   |   |
|  | TT          | 9  | Rea         | rs                 | amp         |                                       | 7       | 1     | 221-         | CAL          | 2F,1    | 881     | 39;1 | ,17  | 400   | , NSA    |        |           |         |   |      |      |     |                  |  |   |  |   |   |
| <u></u>  | 1           |  |             | ta                 | file<br>od  |                                       |         |       |              | 800<br>TA2   |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             | 10.  | San         | nple               |             |                                       | 6       | 1:    | 221-         |              | 1F, 1   | 881     | 36:1 | ,17  | 401   | , NSA    |        |           |         |   |      |      |     |                  |  |   | 1  |   |   |
|  |             |  | Me          | the                | рđ          |                                       |         | GI    | EBIC         | TA2          | 017     |         |      |      |       |          |        |           |         |   |      |      |     |                  |  |   |  |   |   |
| -  | +           | 11)  | Rea         |                    | amp<br>file |                                       | 8       |       |              | BO1          |         | .855    | 38:1 | , 17 | 400,  | , NSA    |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             | 121  | Мe<br>San   | the                |             |                                       | 7       |       |              | TA2          |         | 983     | 39.1 | .17  | 401   | NSA      |        |           |         |   |      |      |     |                  |  | _                                       |  |   |   |
|  |             | 12)  | Da          | tai                | file        |                                       | ,       | 02    | 2011         | 801          | 2       | .001    |      | ,    | , , , | , 11021  |        |           |         |   |      |      |     |                  |  |   |  |   |   |
|  | +-+         | 13)  | Me<br>Rea   | rSa                |             |                                       | 9       |       |              | CAL          |         | 881     | 40:1 | , 17 | 400   | NSA      |        |           |         |   |      |      |     |                  |  | 1                                       | 1  |   |   |
|  |             |  |             | tat                | file        |                                       |         |       |              | 8010<br>TA20 |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | 1                                       |  |   |   |
|  |             | 14)  | Sam         | ple                | 9           |                                       | 8       | 12    | 221          | CAL          | 3F,1    | 855     | 38:1 | , 17 | 401,  | NSA.     |        |           |         |   |      |      |     |                  |  | -                                       |  |   |   |
| <b></b>  | 1           |  |             | thi                | file<br>od  |                                       |         |       |              | 801<br>TA20  |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | 1                                       |  |   |   |
| <u> </u>   | 1-1-        | 15)  | Rea<br>Da   |                    | amp<br>file |                                       | 10      |       |              | CALS<br>8015 |         | 881     | 41:1 | ,17  | 100,  | , NSA    |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
| and the second s |             | 361  | Me          | the                | od          |                                       | 9       | GE    | EBIC         | TA2          | 017     | 881     | 40.1 | 17   | 4 O 1 | NSA      |        |           |         |   |      |      |     |                  |  |   |  |   |   |
|  | 1           | 16)  |             | tai                | file        |                                       | 3       | 02    | 2011         | 801          | 6       | 001     | -V:I | ,    |       | non      |        |           |         |   |      |      |     |                  |  |   |  |   |   |
|  |             | 17)  | Me<br>Rea   | rSa                |             |                                       | 11      |       | EBIO<br>EXAN | TA2(<br>E    | U17     |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | -                                       | -  |   |   |
| - Constitution of the Cons | 1           | ,  | Da          |                    | file        |                                       |         | 02    | 2011         | 801<br>TA20  |         |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | _                                       |  |   |   |
| 777-840  | -           | 18)  | Sam         | ple                | 3           |                                       | 10      | 1.2   | 221-         | CALS         | 5F,1    | 881     | 41:1 | .17  | 01,   | NSA      |        |           |         |   |      |      |     |                  |  | **************************************  | 1  |   |   |
| <b></b>  | 1           |  |             | tai                | file        |                                       |         | GE    | EBIO         | B018         | 017     |         |      |      |       |          |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             | 19)  | Rea         | rSa                |             |                                       | 12      |       |              | CAL1         |         | 881     | 32:1 | ,174 | 100,  | NSA      |        |           |         |   |      |      |     |                  |  | +                                       |  |   |   |
|  |             |  |             |                    |             | . دست                                 | T> 1-   |       |              |              | •       | . = 0   | 201  | Ω    |       |          |        |           |         | P | age: | 1    |     |                  |  |   |  |   |   |
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|  |             |  |             |                    |             |                                       |         |       |              |              |         |         |      |      |       | 1        |        |           | 1       | 1 | B/J  | 4    | 9   | 181              | 18   |   |  |   |   |
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|  |             |  |             |                    |             |                                       |         |       |              |              |         |         |      | D    | 1     | 4 11     | laret: | nad r     | Ω.,     |   |      |      |     |                  |  |   |  |   |   |
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|  | 1           | Sig  | med         |                    | /           |                                       |         |       |              | Dat          | te      |         |      | `    |       |          |        | Sign      | ned     |   |      |      |     |                  |  | D8                                      | ate  |   |   |
|  | /           |  | /           |                    |             |                                       |         |       |              |              |         |         |      |      |       |          |        |           |         |   |      |      | -   |                  |  |   |  |   |   |

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|--|--|----------|--------------|--------------|---------------|-----------------|-------------|--------|--|----|---------|-----|---------------|----------------|-------------|-----------|-----------------|----------|-----------|---|---|----------|--------------|-----|-------|------|-------|---|------------|---|---|
|  |  |          |              |              |               | -               |             |        |  |    |         |     |               |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
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|  |  |          |              | 1            | }             | }               | ļ           | ş      | ł  | ,  |         | 4   | 3 1           |                | ,           | ;         |                 |          |           |   |   |          |              |     |       |      |       | -                                       |            |   |   |
|  | ļ  | +        |              |              |               | Me              | tho         | d      |  |    |         | GEE | SIOTA         | 120            | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   | -          | -                                       |   |
|  |  |          |              |              | 20)           |                 |             |        |  |    | 11      | HEX |               |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  | <del> </del>   | +        |              |              |               |                 | taf         |        | 9  |    |         |     | 1180<br>310T# |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       | -                                       |            |   |   |
|  |  | İ        |              |              | 21)           |                 | tho         |        |  |    | 1.3     |     |               |                |             | 5547      | 1:1,1           | 740      | 00.N      | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
| -  | <del> </del>   | +        |              |              | 211           |                 | taf         |        | ۵,   |    | 1.5     |     | 1180          |                | <i>,</i>    |           | , -             |          | ,         |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | tho         |        |  |    |         | GEE | TOTA          | 120            | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   | - |
| -  |  | -        |              |              | 22)           | Sam             | p1e         |        |  |    | 12      |     |               |                | 3,18        | 8132      | :1,1            | 1740     | )1,N:     | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | €  |    |         |     | 1180          |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  | ļ  |          |              |              |               |                 | tho         |        |  |    |         |     | TOTA          |                |             | 5511      | 1.1,1           | 740      | ינאר מו   | 42                                      |   |          |              |     |       |      |       | ·                                       |            |   |   |
|  | -  |          |              |              | 23)           |                 | taf         |        |  |    | 14      |     | 1180          |                | 3,10        | 2244      | ت و شد.و)<br>په | . / -1 < | , 0 , 111 |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  | -        |              |              |               |                 | tho         |        | 3  |    |         |     | IOTA          |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       | Section State Spin                      |            |   |   |
|  |  |          |              |              | 24)           |                 |             |        |  |    | 13      |     |               |                |             | 5543      | :1,1            | 740      | )1,N      | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | 23.  |    |         |     | 1180          |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | tho         |        |  |    |         |     | IOTA          |                |             | ceae      | 1 1             | 7 41     | 10 81     | a o                                     |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 25)           |                 |             |        | _  |    | 15      |     | 12-CF         |                | 3,18        | 5545      | :1,1            | 1.41     | 10,19     | ÞΜ                                      |   |          |              |     |       |      |       | *************************************** |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | 2  |    |         |     | IOTA          |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
| L  |  |          |              |              | 26)           |                 |             |        |  |    | 14      | 124 | 2-CF          | AL3E           | 3,18        | 5544      | :1,1            | 740      | )1,N      | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  | -  |          |              |              |               |                 | taf.        |        | €  |    |         |     | 1180          |                | -           |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
| L  |  |          |              |              |               |                 | tho         |        |  |    |         | GEE | TOI           | 120            | 17          | :_        |                 |          |           | ~ ~                                     |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 27)           |                 |             |        |  |    | 16      | 124 | 2-CF          | AL5E           | 3,18        | 5546      | :1,1            | 740      | 10, N     | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | 3  |    |         |     | 1180<br>10T#  |                | 7           |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   | Ì |
|  |  |          |              |              | 28)           |                 | tho:        |        |  |    | 15      |     |               |                |             | 5545      | ::1,1           | 740      | )1,N      | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf         |        | <u>a</u>   |    |         |     | 1180          |                | ,           |           |                 |          |           |   |   |          |              |     |       |      |       |   |            | 1                                       |   |
|  |  | T        |              |              |               | Me              | tho         | đ      |  |    |         | GEE | IOTA          |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       | -hammanité                              | T          | T                                       |   |
|  |  |          |              |              | 29)           |                 |             |        |  |    | 17      | HEX |               |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | 2  |    |         |     | 11180<br>10TA |                | 1.7         |           |                 |          |           |   |   |          |              |     |       |      |       | *************************************** |            |   |   |
|  | Si income  |          |              |              | 30)           |                 | tho         |        |  |    | 16      |     |               |                |             | 5546      | :1,1            | 7.4.0    | )1,N:     | SA                                      |   |          |              |     |       |      |       |   | 5          | 1                                       |   |
|  |  |          | m            |              | 507           |                 | taf.        |        | 2  |    | * 0     |     | 1180          |                | ,           |           | •               |          |           |   |   |          |              |     |       |      |       |   |            | 1                                       |   |
|  |  |          |              |              |               |                 | tho         |        |  |    |         |     | IOTA          |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            | į                                       |   |
|  |  |          |              |              | 31)           |                 |             |        |  |    | 18      |     |               |                | ), 18       | 8134      | :1,1            | 1740     | 10, N     | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | 9  |    |         |     | 1180          |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 32)           |                 | tho         |        |  |    | 17      | HEX | IOTA          | 120            | . ,         |           |                 |          |           |   |   |          |              |     |       |      |       |   | -          |   |   |
|  |  |          |              |              | 32;           |                 | taf         |        | e  |    | 1 '     |     | 1180          | 32             |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          | ******       |              |               |                 | tho         |        | -  |    |         | GEE | IOTA          | 1203           | L:7         |           |                 |          |           |   |   |          |              |     |       |      |       | veenne                                  | 1          |   | - |
|  |  |          |              |              | 33-)          |                 |             |        |  |    | 19      |     |               |                | 5,18        | 5546      | 1:1,7           | L740     | 00, N     | SA                                      |   |          |              |     |       |      |       |   |            | 4                                       |   |
|  |  |          |              |              |               |                 | taf         |        | <del>≥</del>   |    |         |     | 1180          |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   | _          | _                                       |   |
|  |  |          |              |              | 241           |                 | tho         |        |  |    | 18      | 124 | IOTA          | A∠U.<br>A717   | L-/<br>5 18 | 2134      | :1,1            | 740      | ) 1 . N   | sa.                                     |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 34)           |                 | taf         |        | 5  |    | 10      |     | 1180          |                | , 10        | 010       | , .             |          |           |   |   |          |              |     |       |      |       | *******                                 | _          | 1                                       | _ |
|  |  |          |              |              |               |                 | tho         |        | ~  |    |         | GEE | TOTA          | 120            | 1.7         |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 35)           | Rea             | rSa         | mp     |  |    | 20      |     |               |                | 0,18        | 5549      | 1:1,1           | L74(     | 10,N      | SA                                      |   |          |              |     |       |      |       | -01-60-00                               |            |   |   |
|  |  |          |              |              |               |                 | taf         |        | ⊋  |    |         |     | 1180          |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 201           |                 | tho         |        |  |    | 19      | GEE | IOTA          | 12U.           | L/<br>5 3 8 | 5546      | :1,1            | 740      | 11 . N    | SA                                      |   |          |              |     |       |      |       | **********                              | -          | +                                       |   |
|  |  |          |              |              | 36)           |                 | pie<br>taf. |        |  |    | 13      |     | 1180          |                | ,,,,,       | J J 71. U | ,, ,,,          |          |           | ~                                       |   |          |              |     | ,     |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | tho         |        | -  |    |         | GEE | TOI           | 1203           | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   |            | -                                       |   |
|  |  |          |              |              | 37)           | Rea             | rSa         | mp     |  |    | 21      |     |               |                | 0,18        | 555C      | 1,1             | 1740     | 00,N      | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf.        |        | 2  |    |         |     | 1180          |                | . ~,        |           |                 |          |           |   |   |          |              |     |       |      |       | ~~~                                     |            |   |   |
|  |  |          |              |              | 201           |                 | tho         |        |  |    | 20      |     | IOT?          |                |             | 5540      | 1,1             | 740      | 1.N       | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 38)           |                 | pie<br>taf. |        | <b>a</b>   |    | 20      |     | 1180          |                | ,, 10       | J J . J   |                 |          | ,         |   |   |          |              |     |       |      |       |   | +          | +                                       | + |
|  |  |          |              |              |               |                 | tho         |        | -  |    |         | GEE | IOTA          | 120            | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   | 1          |   |   |
|  |  | $\vdash$ |              |              | 39)           | Rea             | rSa         | mp     |  |    | 22      |     |               |                | 0,18        | 5551      | :1,3            | 1740     | 10,N      | SA                                      |   |          |              |     |       |      |       | *********                               | +          | +                                       | + |
|  |  |          |              |              |               |                 | taf         |        | 9  |    |         |     | 1180          |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   | į          |   |   |
|  |  |          | i            |              |               | Me              |             |        |  |    | 21      | 124 | SIOTA         | 1∠U.<br>1,1,41 | 17<br>7.19  | 5550      | :1,             | 174      | 01.N      | SA                                      |   |          |              |     |       |      |       | ******                                  |            | +                                       | + |
|  |  | l        | ļ            |              | 40)           |                 | pie<br>taf  |        | 2  |    | 2 1     |     | 1180          |                | .,          |           | , .             |          | ,         |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | tho         |        |  |    |         | GEE | SIOTA         |                | 17          |           |                 |          |           |   |   |          |              |     |       |      |       |   |            | +                                       | - |
| Yestifugo  |  |          | 1            |              | 41)           | Rea             | rSa         | mp     |  |    | 23      | HEX |               |                |             |           |                 |          |           |   |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              |               |                 | taf         |        | 3  |    |         |     | 1180          |                | . 7         |           |                 |          |           |   |   |          |              |     |       |      |       |   |            | +                                       | - |
| and the same of th |  |          |              |              | 42)           |                 | tho         |        |  |    | 22      | 124 | SIOTA         | 32 U.<br>31.5! | .,<br>5.18  | 5551      | :1,1            | 740      | 01.N      | SA                                      |   |          |              |     |       |      |       |   |            |   |   |
|  |  |          |              |              | 42}           |                 | taf         |        | ≘  |    |         |     | 1180          |                | _ ,         |           |                 | -        | ,         |   |   |          |              |     |       |      |       | *******                                 | +          | +                                       | - |
| To the same of   |  |          |              |              |               |                 | tho         |        |  |    |         | GEF | TOTA          | 420            | 17          |           |                 |          |           | n 1                                     |   |          |              |     |       |      |       |   | l          | *************************************** |   |
|  |  |          |              |              | 43)           |                 |             |        |  |    | 24      | 125 | 4-C           | ALIC           | 0,18        | 8135      | :1,1            | 140      | 00,A      | K.T.                                    |   |          |              |     |       |      |       |   | -          | +                                       | - |
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|  | -  | -  | 46          | ) Sam                                   |                |  |              | 24   |   |              |  |             | 1,35:     | 1,17                                    | 401,   | AR1          |  |   |    |          |   |      |      | ***  |  |   |   |
| W CONTRACTOR   |  |  |             |   | tafi           |  |              |      | 0201                                    | 1804         | 46                                     |             |           |   |        |              |  |   |    |          |   |      |      |  |  |   |   |
|  | <del> </del>   | -  | 47          | ме<br>Rea                               | rSam           |  |              | 26   |   | OTA2         |  |             | 554:      | 1., 17                                  | 400,2  | ARI          |  |   |    |          |   |      |      |  |  |   |   |
| 5  |  |  |             | Da                                      | tafi           | le   |              |      | 0201                                    | 1804         | 47                                     |             |           | ,                                       |        |              |  |   |    |          |   |      |      | -  |  |   |   |
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|  | -  |  | 43          |   | tafi           |  |              | 21   | 0201                                    |              |  | 100         | 555.      | 1, 4,                                   | 400,1  | ****         |  |   |    |          |   |      |      |  |  |   |   |
|  |  |  |             |   | thod           |  |              | 0.0  | GEBI                                    |              |  |             |           |   | 401 1  | urin.        |  |   |    |          |   |      |      |  |  |   |   |
|  | 1  |  | 50          | ) Sam<br>Da                             | ple<br>tafi    | le   |              | 26   | 0201                                    |              |  | T 2 2       | 254:      | 1,17                                    | 401,2  | 11.7         |  |   |    |          |   |      |      | -  |  |   |   |
|  |  |  |             | Me                                      | thod           |  |              |      | GEBI                                    | OTA2         | 2017                                   |             |           |   |        |              |  |   |    |          |   |      |      |  |  |   |   |
|  |  | -  | 51          | Rea.                                    | rSam;<br>tafi  |  |              | 28   | 1254                                    |              |  | 185         | 556:      | 1,17                                    | 400,2  | KI           |  |   |    |          |   |      |      |  |  |   |   |
|  |  |  |             | Me                                      | thod           |  |              |      | GEBI                                    | OTA2         | 2017                                   |             |           |   | -1     |              |  |   |    |          |   |      |      | _  |  |   |   |
| 4  | and desirated an |  | 52)         | Sam                                     |                | 16   |              | 27   | 1254                                    |              |  | 185         | 555:      | 1,17                                    | 401,7  | Rl           |  |   |    |          |   |      |      |  | ***************************************  |   |   |
|  |  |  |             |   | tafi:<br>thod  |  |              |      | GEBI                                    |              |  |             |           |   |        |              |  |   |    |          |   |      |      |  |  |   |   |
|  |  |  | 53)         | Rea                                     |                |  |              | 29   | HEXA                                    |              |  |             |           |   |        |              |  |   |    |          |   |      |      | 1- {   | 1  | 1                                       |   |
|  |  |  |             |   | tafi.          |  |              |      | 0201<br>GEBI                            |              |  |             |           |   |        |              |  |   |    |          |   |      |      | 7  |  |   |   |
|  | ļļ   |  | 54)         | Sam                                     | ple            |  |              | 28   | 1254                                    | -CAI         | 5C,                                    |             | 556:      | 1,17                                    | 401,   | R1           |  |   |    |          |   |      |      | _  |  |   |   |
| Abtended   |  |  |             |   | tafí:<br>thod  |  |              |      | 0201<br>GEBI                            |              |  |             |           |   |        |              |  |   |    |          |   |      |      | apon a second  | and the same   |   |   |
|  |  | erenennesson.  | 551         | Rea                                     |                |  |              | 30   |   |              |  |             | 136:      | 1,17                                    | 400,1  | SA           |  |   |    |          |   |      |      | -  |  |   |   |
|  |  |  |             |   | tafi.          |  |              |      | 0201<br>GEBI                            |              |  |             |           |   |        |              |  |   |    |          |   |      |      |  |  |   |   |
| ***************************************  |  | and the same of th | 56)         | Sam                                     | thod<br>ple    |  |              | 29   | HEXA                                    |              | .019                                   |             |           |   |        |              |  |   |    |          |   |      |      | -  |  |   |   |
|  |  | -  |             | Da                                      | tafil          |  |              |      | 0201                                    |              |  |             |           |   |        |              |  |   |    |          |   |      |      | 1  |  |   |   |
| And the state of t | 400  |  | 571         | Mei<br>Real                             | thod<br>rSamm  |  |              | 31   | GEBI<br>1660                            |              |  |             | 558:      | 1,17                                    | 400,1  | SA           |  |   |    |          |   |      |      | 1  | and the same of th | *************************************** |   |
|  |  |  | 9.,         | Dat                                     | tafil          |  |              |      | 0201                                    | 1805         | 7                                      |             | *.        |   | , .    |              |  |   |    |          |   |      |      |  |  |   | *************************************** |
| Andrews and the second   |  |  | 501         | Met                                     | thod           |  |              | 3.0  | GEBI<br>1660                            |              |  |             | 136:      | 1.37                                    | 401,1  | ISA          |  |   |    |          |   |      |      | 4  | Sindian des  | -                                       |   |
| _  |  |  | 56)         |   | tafi]          | le   |              | 30   | 0201                                    |              |  | 100.        |           | 1,1,                                    | 101,   |              |  |   |    |          |   |      |      | 1  |  |   | *************                           |
|  |  | winner.  | E 0 \       |   | thod           | _  |              |      | GEBI                                    |              |  |             | 550.      | 1 17                                    | 400,1  | C 20         |  |   |    |          |   |      |      |  | 9000   |   |   |
|  |  |  | 59)         | Real                                    | rsamp<br>tafil |  |              | 32   | 0201                                    |              |  | 165         | 333.      | 1,1,                                    | 400,1  | 5.4          |  |   |    |          |   |      |      |  | -  |   |   |
|  |  |  |             | Met                                     | thod           |  |              |      | GEBI                                    |              |  |             |           |   |        |              |  |   |    |          |   |      |      | 4  |  |   |   |
|  |  |  | 60)         | Samp                                    | ple<br>tafi]   | l e  |              |      | 0201                                    |              |  | 182         | 258:      | 4.2.4.1                                 | 401,N  | SA           |  |   |    |          |   |      |      |  |  | Page 1                                  |   |
|  |  |  |             |   | thod           |  |              |      | GEBI                                    | OTA2         | 017                                    |             |           |   |        |              |  |   |    |          |   |      |      | +  | -  |   | -                                       |
|  |  |  | 61)         | Real                                    | rSamp<br>tafil |  | ,            |      | 1660                                    |              |  | 1855        | 60:       | 1,17                                    | 400, N | SA           |  |   |    |          |   |      |      |  | and the same of th |   |   |
|  |  | -  |             |   | thod           | . 6  |              |      | GEBI                                    | OTA2         | 017                                    |             |           |   |        |              |  |   |    |          |   |      |      | +  | Ī  |   | *****                                   |
|  |  | make and   | 62)         | Samp                                    |                | 1.6  | :            | 32   |   |              |  | 1855        | 559:      | 1,17                                    | 401, N | SA           |  |   |    |          |   |      |      | -  |  |   |   |
| Territorio company   | -  |  |             |   | tafil<br>thod  | . e  |              |      | 0201<br>GEBI                            | OTA2         | 017                                    |             |           |   |        |              |  |   |    |          |   |      |      | AND AND ADDRESS OF THE PERSON  | Monthonia  | 1                                       |   |
|  | -  |  | 63)         | Rear                                    | rSamp          |  | :            | 34   | 1660                                    | -CAL         | 5A,                                    |             | 61:       | 1,17                                    | 400.N  | SA           |  |   |    |          |   |      |      | -  |  |   | an e de damana                          |
| ***************************************  |  |  |             |   | tafil<br>thod  | l e  |              |      | 0201<br>GEBI                            |              |  |             |           |   |        |              |  |   |    |          |   |      |      | and which the  | T, () C T T  |   |   |
|  |  | ***************************************  | 64)         | Samp                                    | ple            |  | :            | 33   | 1660                                    | -CAL         | 4A,                                    | 1855        | 60:       | 1,17                                    | 401,N  | SA           |  |   |    |          |   |      |      | 1  |  |   |   |
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| U UUUAAAA  | Were the singless.   |  | 65)         | Rear                                    | rSamp          |  |              | 35   | HEXA                                    | NE           |  |             |           |   |        |              |  |   |    |          |   |      |      | distant of   | drivers  | -                                       |   |
|  |  |  |             |   | tafíl          | e  |              |      | 0201<br>GEBI                            |              |  |             |           |   |        |              |  |   |    |          |   |      |      | -  |  |   |   |
| anapanapa<br>anapanapa   | ***************************************  |  | 661         | Samp                                    | thod<br>ple    |  |              |      |   |              |  | 1855        | 61:       | 1,17                                    | 401,N  | SA           |  |   |    |          |   |      |      | 0.000  | 100  |   |   |
| -  | www  |  | /           |   | tafil          | le   |              |      | 0201                                    |              |  |             |           |   |        |              |  |   |    |          |   |      |      | - Tours  | -  | -                                       |   |
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| -  | -  | -                                       | -  | 6  | 3≀) Sa<br>r | mple<br>Dataf |        |                    | 35   |     | XANE<br>0118  |            |           |  |                     |           |          |          |          |        |    |             |   |      |           |  |  | *********                                      |          |
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|  | 1  | 1                                       |  | 6  | 3) Re       | arSa<br>ataf  |        |                    | 37   | 12  | 42-I<br>0118  | CV,1       | 855       | 62:  | 1,17                | 400,      | , AR     | 124      | 04       |        |    |             |   |      | -         |  | $\rightarrow$  |  | -        |
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|  |  |   |  | 71   | )) Sá       | mple<br>Sataf |        |                    | 36   |     | 21-I<br>0118  |            | 881       | 142:   | 1,17                | 401.,     | , AR     | 122      | D/C      |        |    |             |   |      |           |  |  | ***************************************        |          |
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|  |  |   |  | 7.   | L) Re       | arSa          |        |                    | 38   |     | 48-I<br>0118  |            | 855       | 6.6.3:   | 1,17                | 400,      | , AR     | 124      | 014      | •      |    |             |   |      |           | 1  | ***********  |  |          |
|  |  |   |  |  |             | letho         | d      |                    |      | GE  | BIOT          | A201       |           |  |                     |           |          |          |          |        |    |             |   |      | •         |  |  |  |          |
| -  | <b>_</b>   |   |  | 7:   | 2) Sa       | mple<br>ataf  |        |                    | .37  |     | 42-I<br>0118  |            | 855       | 62:  | 1,17                | 401,      | , AR     | 124      | 010      | •      |    |             |   |      |           |  |  |  |          |
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|  | <u> </u>   | <del> </del>                            |  | 7  | 3) Re       | arSa          |        |                    | 39   |     | 54-I<br>0118  |            | 855       | 64:  | 1,17                | 400,      | , AR.    | 125      | 010      | •      |    |             |   |      |           |  | -+   |  |          |
|  |  |   |  |  |             | letho         |        |                    |      | GE  | BIOT          | A201       | 7         |  |                     |           |          |          |          |        |    |             |   |      |           | 4  | adal armed.  |  |          |
|  | and and and and and and and and and and  |   |  | 7  | i) Sa       | mple          |        |                    | 38   |     | 48-I<br>0118  |            | 855       | 63:  | 1,17                | 401,      | , AR     | 124      | ov.      |        |    |             |   |      | •         |  |  |  |          |
| <u> </u>   | ļ  | -                                       |  |  |             | letho         |        |                    |      | GE  | BIOT          | A201       | 7         |  | _                   |           |          |          |          |        |    |             |   |      |           |  | $\rightarrow$  |  |          |
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| <u> </u>   | ļ  | -                                       |  | . 71   | 5) Sa       | mple          |        |                    | 39   |     | 54-I<br>0118  |            | 855       | 64:  | 1,17                | 401,      | , AR     | 125      | OV       |        |    |             |   |      |           |  |  |  |          |
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| -  |  |   |  | . 7*   | ) Re        | arSa          |        |                    | 41   |     | 21-C<br>0118  |            | 188       | 1138   | :1,1                | 7400      | J, KI    | -12      | OV       | 1.     |    |             |   |      |           | -  | -  |  |          |
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|  |  |   |  | . 80   | ) Sa        | mple<br>ataf  |        |                    | 41   |     | 21-C:<br>0118 |            | 186       | 138  | :1,1                | 1401      | 1,81     | 412      | 014      |        |    |             |   |      |           |  |  |  |          |
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Notebook No. 4418 PROJECT 406CSI 00/27/18 Bareener Continued from Page SCREEN2014 Method 40165048-005 20) Sample 20 Datafile Method SCREEN2014 40165048-008 21) RearSamp 21 Datafile Method SCREEN2014 22) Sample 22 40165048-009 Datafile SCREEN2014 Method 23) RearSamp 23 40165048-010 Datafile Method SCREEN2014 24) Sample 40165048-011 Datafile SCREEN2014 Method 25) RearSamp 40165048-012 Datafile Method SCREEN2014 26) Sample 26 40165129-001 Datafile SCREEN2014 Method 27) RearSamp 27 40165129-002 Datafile GE BIOTA SCREEN2014 Method 28) Sample 28 40165129-003 Datafile Method SCREEN2014 29) RearSamp 29 1652256MB Datafile SCREEN2014 Method 1652257LCS 30) Sample 30 Datafile Method SCREEN2014 1652258MS ×10 31) RearSamp 31 Datafile SCREEN2014 Method 32) Sample 32 1652259DUP x 10 Datafile SCREEN2014 Method 40151542-001 33) RearSamp 33 Datafile Method SCREEN2014 34) Sample 40151542-002 ×10 Datafile SCREEN2014 Method 351 RearSamp 40151542-003 × 4 Datafile Method SCREEN2014 36 40151542-004P ×10 36) Sample Datafile SCREEN2014 Method 37) RearSamp 37 40151542-005 × 5 Datafile SCREEN2014 Method 38) Sample 38 40151542-006 × 3 Datafile Method SCREEN2014 Page: Last Modified: Tue Feb 27 14:19:04 2018 BIM 3/15/18 Continued on Page Read and Understood By 3/15/18 Signed Signed Date

40151542 Rev3

| SAMPLE | Ν | O |
|--------|---|---|
|--------|---|---|

## FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD4-170612-01-SMB-01

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40151542 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40151542001            | _                 | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |  |
|---------|---------|---------------|---|-------|----|--------------------|--|
|         | Lipid   | 0.64 🗸        |   | %     | 1  | 02/27/2018 07:05   |  |

## FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170612-01-SMB-05

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40151542 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40151542002            |                   | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 0.37          |   | %     | 1  | 02/27/2018 07:05   |



## FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170612-01-SMB-04

Lab Name: Pace Analytical - Green Bay SDG No. : 40151542 Contract: HUDSON RIVER REMEDIAL
Lab Sample ID: 40151542003 Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 0.70 🗸        |   | %     | 1  | 02/27/2018 07:05   |

## FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170612-01-SMB-03

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40151542 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40151542004            |                   | Percent M | loisture:             |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 0.38          |   | %     | 1  | 02/27/2018 07:05   |

## FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170612-01-SMB-02

| Lab Nam | e: Pace Analy | tical - Green Bay | _SDG No. | : <u>40151542</u> |   | Contra | ict: <u>Hl</u> | JDSON RIVER REMEDIA | AL |
|---------|---------------|-------------------|----------|-------------------|---|--------|----------------|---------------------|----|
| Lab Sam | ple ID: 40151 | 542005            | _        |                   |   | Percer | nt Moist       | ture:               |    |
| Г       |               |                   |          |                   |   |        | 1              |                     |    |
|         | CAS No.       | Analyte           |          | Concentration     | Q | Units  | DF             | Analysis Date/Time  |    |
|         |               | Lipid             |          | 0.16              |   | %      | 1              | 02/27/2018 07:05    |    |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170612-01-SMB-01

02/27/2018 07:05

| Lab Name: Pace Analyt | ical - Green Bay SDG No. | . : <u>40151542                                  </u> |   | Contra | ct: <u>H</u> L | JDSON RIVER REMEI  | DIAL |
|-----------------------|--------------------------|---|---|--------|----------------|--------------------|------|
| Lab Sample ID: 401515 | 542006                   |   |   | Percen | t Moist        | ure:               |      |
| CAS No.               | Analyte                  | Concentration   | Q | Units  | DF             | Analysis Date/Time |      |

0.62



Lipid

### FORM III INORGANIC-1 BLANKS

| Lab Name. Pace Analy | rtical - Green Bay  | SDG NO. | . 40151542 | Contract. HODS     | SON KIVE | K KEMEDI | AL ACTION IVI |     |
|----------------------|---|---------|------------|--------------------|----------|----------|---------------|-----|
| Method Blank Matrix: | d Blank Matrix: <u>Tissue</u> d Blank Concentration Units: <u>%</u> Initial Calibration Blank |         | Instrument | ID: 40BALL         | _        |          |               |     |
| Method Blank Concent | ration Units: <u>%</u>  | 7541    | _          |                    |          |          |               |     |
| Calibration          |   | ion     | Con        | tinuing Calibratio | n Blank  |          | Method Bla    | ınk |
| -                    |   | С       | С          |                    | С        | С        | 1652270       | С   |



U

< 0.030

Lipid

### FORM VI INORGANIC-1 DUPLICATES

| SAMPLE | NO. |
|--------|-----|
|        |     |

1652271DUP

| Lab Name: | Pace Analytical - Green Bay | SDG No.: 40151542      | Contract: | HUDSON RIVER REMEDIAL |
|-----------|-----------------------------|------------------------|-----------|-----------------------|
| Matrix:   | Tissue                      | Concentration Units: % |           |                       |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 0.38   | 0.35      | 6   |

Basis: Wet

Percent Moisture:



Batch Information: OEXT 281922 LIPIDS

### Template Version: F-GB-O-145-Rev.00 (17Feb2015) LIPID

| Analysis Method Pace Lipid | Analyzed By AMC                   | Instrument 40BALL | Batch Notes |
|----------------------------|-----------------------------------|-------------------|-------------|
| Reviewed By BLM            | Reviewed By Date 05/03/2018 13:04 |                   | 1, 1 = j    |

Sample Information:

| Campio iiii |             | •             |        |                |                                |   |                      |                       |                |                 |                  |              |              |
|-------------|-------------|---------------|--------|----------------|--------------------------------|---|----------------------|-----------------------|----------------|-----------------|------------------|--------------|--------------|
| QC Rule.    | Sample Type | Lab Sample ID | Select | Lipid % Posted | Run Date/Time                  | O | Sample Weight<br>(g) | Sample Volume<br>(mL) | Aliquot (m.L.) | Dish Weight (g) | Dry Weight 1 (g) | Dry Wt Use 1 | Sample Notes |
| LIPID       | BLANK       | 1652270       | Y      | 0.000          | 02/27/2018<br>07:05:34         |   | 10                   | 5                     | 1              | 0.9334          | 0.9334           | M            |              |
| LIPID       | BLANK       | 1652277       | Y      | 0.000          | 02/27/2018<br><b>27</b> :05:34 |   | 10                   | 5                     | 1              | 0.9307          | 0.9307           | М            |              |
| LIPID       | PS          | 40151542001   | Y      | 0.6426         | 02/27/2018<br>07:05:34         |   | 9.9602               | 5                     | 1              | 0.9323          | 0.9451           | М            |              |
| LIPID       | PS          | 40151542002   | Y      | 0.3661         | 02/27/2018<br>97:05:34         |   | 9.9707               | 5                     | 1              | 0.9303          | 0.9376           | М            |              |
| LIPID       | PS          | 40151542003   | Y      | 0.6979         | 07:05:34                       |   | 10.0308              | 5                     | 1              | 0.9321          | 0.9461           | М            |              |
| LIPID       | PS          | 40151542004   | Y      | 0.3753         | 02/27/2018<br>07:05:34         |   | 9.9911               | 5                     | 1              | 0.9336          | 0.9411           | М            |              |
| LIPID       | DUP         | 1652271       | Y      | 0.3547         | 02/27/2018<br>\$7:05:34        |   | 10.0075              | 5                     | 1              | 0.9289          | 0.936            | М            |              |
| LIPID       | PS          | 40151542005   | Y      | 0.1554         | 82/27/2010                     |   | 9.9714               | 5                     | 1              | 0.9332          | 0.9363           | М            |              |
| LIPID       | PS          | 40151542006   | Y      | 0.6244         | 02/27/2018<br>07:05:34         |   | 10.0093              | 5                     | 1              | 0.9318          | 0.9443           | М            |              |
| LIPID       | MS          | 1682421       | Y      | 0.3242         | 02/27/2018<br>07:05:34         |   | 10.0244              | 5                     | 1              | 0.933           | 0.9395           | М            |              |

| Client Name: GE            |          |
|----------------------------|----------|
| Project #: 4015            | 1542     |
| Date/Time Removed to Thaw: | 02-13-18 |
| Date/Time Prepped:         | 02-14-18 |
| Prepped by: CMN            |          |

40151542\_Rev3

Biota Homogenization Log (NYDOH Method)



4407 Location: 40FR 21 / Room Temperature (circle one) Logbook: Composite Picture of Internal Sample Scales/Skin Whole Gender Fish/Weight Organs Picture of Weight of (> 1 per Sample Type Body/Fillet (Optional) Left/Both Container Removed Taken? Total Fish Intact Jars/Weight homogenized Sample ID) Sample ID (Fish, Eggs, etc.) (Y/N) (WB/F) Weight (g) M/F/I<sup>3</sup> Fillet1? Sample (g) (Y/N) (Y/N) Code<sup>2</sup> Taken? (Y/N) (Y/N) Sample Comments Laft Both 9 AG Fish 537.1 N Fish 136.9 WA / Both 9AG 537.b = N Fish 78.1 Left Both 9AG OZ- CHOP GLIND 350.0 N 4 Fish 164.9 Left Both 9AG Chop d.28F 160.1 Fish 552.3 118, 7 Left/Both 9AG 114.9 Chop 5 118.0 Left Both 9AG 566.8 Left / Both Left / Both 419 Left / Both of Left / Both Left / Both Left / Both veft / Both Left / Both (1) If left fillet weight is under 40g, the right fillet in included in the sample weight. (2) Note Container Type / Lot # using Codes Below:

Container Code Container Size Lot# 2CG 2 oz Clear Glass 4AG 4 oz Amber Glass F-7-212-04AR 9AG 9 oz Amber Glass 32AG 32 oz Amber Glass

1 Left fillet orly- CWN 03-16-18

2 'x' through the Fillst menus that was the fillet taken - CWN 04-27-18

(3) M = Male, F = Female, I = Indeterminate F-G8-O-153-REV.00 (08Feb2018) Pace Analytical Services, LLC - Green Bay, WI



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Sample: TD4-170612-01-SMB-01

Lab ID: 40151542001

Collected: 06/12/17 16:16 Received: 06/13/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Results               | Units   | PQL -   | MDL   | DF  | Prepared  | Analyzed   | CAS No.  | Qual   |
|-----------------------|---|---|---|---|---|--|--|--|
| Analytical            | Method: EPA   | A 8082A Mod   | Preparation   | Metho   | od: EPA 3541  |  |  |  |
| <11.4                 | ug/kg   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 12674-11-2   |  |
| <11.4                 | ug/kg   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 11104-28-2   |  |
| <11.4                 | ug/kg   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 11141-16-5   |  |
| <11.4                 | ug/kg   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 53469-21-9   |  |
| 150                   |   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 12672-29-6   |  |
| 116                   | 0 0   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 11097-69-1   |  |
| 46.9J                 |   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 11096-82-5   |  |
| 313                   | 0 0   | 50.2  | 11.4  | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 1336-36-3  |  |
|                       | 3 3   |   |   |   |   |  |  |  |
| 84                    | %   | 60-140  |   | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 877-09-8   |  |
| 89                    | %   | 60-140  |   | 1   | 02/27/18 06:56  | 02/28/18 09:53   | 2051-24-3  |  |
| Analytical Analytical | Method: Pad   | e Gender Typ  | ing   |   |   |  |  |  |
| Female                |   |   |   | 1   |   | 02/15/18 15:49   |  |  |
| Analytical            | Method: Pac   | ce Lipid  |   |   |   |  |  |  |
| 0.64                  | %   | 0.030   | 0.030   | 1   |   | 02/27/18 07:05   |  |  |
|                       | Analytical <11.4 <11.4 <11.4 <11.4 150 116 46.9J 313 84 89 Analytical Female Analytical | Analytical Method: EPA  <11.4 ug/kg <11.4 ug/kg <11.4 ug/kg <11.4 ug/kg 150 ug/kg 16 ug/kg 16.9J ug/kg 313 ug/kg 84 % 89 %  Analytical Method: Pace | Analytical Method: EPA 8082A Mod  <11.4 ug/kg 50.2  <11.4 ug/kg 50.2  <11.4 ug/kg 50.2  <11.4 ug/kg 50.2  <11.4 ug/kg 50.2  150 ug/kg 50.2  16 ug/kg 50.2  16 ug/kg 50.2  313 ug/kg 50.2  84 % 60-140  89 % 60-140  Analytical Method: Pace Gender Typ  Female  Analytical Method: Pace Lipid | Analytical Method: EPA 8082A Mod Preparation  <11.4 ug/kg 50.2 11.4  <11.4 ug/kg 50.2 11.4  <11.4 ug/kg 50.2 11.4  <11.4 ug/kg 50.2 11.4  150 ug/kg 50.2 11.4  16 ug/kg 50.2 11.4  116 ug/kg 50.2 11.4  313 ug/kg 50.2 11.4  346.9J ug/kg 50.2 11.4  369 % 60-140  Analytical Method: Pace Gender Typing  Female  Analytical Method: Pace Lipid | Analytical Method: EPA 8082A Mod Preparation Method: 11.4 ug/kg 50.2 11.4 1 | Analytical Method: EPA 8082A Mod Preparation Method: EPA 3541  <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56  150 ug/kg 50.2 11.4 1 02/27/18 06:56  150 ug/kg 50.2 11.4 1 02/27/18 06:56  116 ug/kg 50.2 11.4 1 02/27/18 06:56  46.9J ug/kg 50.2 11.4 1 02/27/18 06:56  313 ug/kg 50.2 11.4 1 02/27/18 06:56  314 02/27/18 06:56  84 % 60-140 1 02/27/18 06:56  Analytical Method: Pace Gender Typing  Female 1  Analytical Method: Pace Lipid | Analytical Method: EPA 8082A Mod Preparation Method: EPA 3541  <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  <11.4 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  150 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  116 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  46.9J ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  313 ug/kg 50.2 11.4 1 02/27/18 06:56 02/28/18 09:53  84 % 60-140 1 02/27/18 06:56 02/28/18 09:53  Analytical Method: Pace Gender Typing  Female 1 02/15/18 15:49  Analytical Method: Pace Lipid | Analytical Method: EPA 8082A Mod Preparation Method: EPA 3541  <11.4 |

#### REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Sample: TD3-170612-01-SMB-05 Lab ID: 40151542002 Collected: 06/12/17 16:09 Received: 06/13/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL        | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod F | reparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <114       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <114       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <114       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <114       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 1900       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 1980       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 11097-69-1 |      |
| PCB-1260 (Arodor 1260)   | 392J       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 11096-82-5 |      |
| PCB, Total               | 4280       | ug/kg       | 501           | 114        | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 1336-36-3  |      |
| Surrogates               |            |             |               |            |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 81         | %           | 60-140        |            | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 105        | %           | 60-140        |            | 10   | 02/27/18 06:56 | 02/28/18 10:09 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ng         |      |                |                |            |      |
| Gender                   | Female     |             |               |            | 1    |                | 02/15/18 15:49 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid       |            |      |                |                |            |      |
| Lipid                    | 0.37       | %           | 0.030         | 0.030      | 1    |                | 02/27/18 07:05 |            |      |

#### REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Sample: TD3-170612-01-SMB-04

Lab ID: 40151542003 Collected: 06/12/17 16:

Collected: 06/12/17 16:07 Received: 06/13/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | N 8082A Mod F | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <45.5      | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <45.5      | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <45.5      | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <45.5      | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 1010       | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 584        | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 103J       | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 11096-82-5 |      |
| PCB, Total               | 1700       | ug/kg       | 199           | 45.5        | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 1336-36-3  |      |
| Surrogates               |            |             |               |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | 84         | %           | 60-140        |             | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 101        | %           | 60-140        |             | 4     | 02/27/18 06:56 | 02/28/18 10:25 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ng          |       |                |                |            |      |
| Gender                   | Female     |             |               |             | 1     |                | 02/15/18 15:49 |            |      |
| Lipid                    | Analytical | Method: Pad | e Lipid       |             |       |                |                |            |      |
| Lipid                    | 0.70       | %           | 0.030         | 0.030       | 1     |                | 02/27/18 07:05 |            |      |

#### **REPORT OF LABORATORY ANALYSIS**



Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40151542

Sample: TD3-170612-01-SMB-03 Lab ID: 40151542004 Collected: 06/12/17 16:05 Received: 06/13/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results      | Units       | PQL           | MDL         | DF    | Prepared       | Analyzed       | CAS No.            | Qual |
|--------------------------|--------------|-------------|---------------|-------------|-------|----------------|----------------|--------------------|------|
| 8082A Modified GCT PCB   | Analytical   | Method: EPA | 8082A Mod     | Preparation | Metho | od: EPA 3541   |                |                    |      |
| PCB-1016 (Aroclor 1016)  | <114         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 12674-11-2         |      |
| PCB-1221 (Aroclor 1221)  | <114         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 11104-28-2         |      |
| PCB-1232 (Aroclor 1232)  | <114         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 11141-16-5         |      |
| PCB-1242 (Aroclor 1242)  | <114         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 53469-21-9         | M1   |
| PCB-1248 (Aroclor 1248)  | 1170         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 12672-29-6         |      |
| PCB-1254 (Aroclor 1254)  | 1690         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 11097-69- <b>1</b> |      |
| PCB-1260 (Aroclor 1260)  | 970          | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 11096-82-5         |      |
| PCB, Total               | 3830         | ug/kg       | 500           | 114         | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 1336-36-3          |      |
| Surrogates               |              |             |               |             |       |                |                |                    |      |
| Tetrachloro-m-xylene (S) | 76           | %           | 60-140        |             | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 877-09-8           |      |
| Decachlorobiphenyl (S)   | 105          | %           | 60-140        |             | 10    | 02/27/18 06:56 | 02/28/18 10:41 | 2051-24-3          |      |
| Fish Gender Typing       | Analytical I | Method: Pac | e Gender Typi | ing         |       |                |                |                    |      |
| Gender                   | Male         |             |               |             | 1     |                | 02/15/18 15:50 |                    |      |
| Lipid                    | Analytical I | Method: Pac | e Lipid       |             |       |                |                |                    |      |
| Lipid                    | 0.38         | %           | 0.030         | 0.030       | 1     |                | 02/27/18 07:05 |                    |      |

#### REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Sample: TD3-170612-01-SMB-02

Lab ID: 40151542005

Collected: 06/12/17 16:03 Received: 06/13/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results             | Units       | PQL              | MDL           | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|---------------------|-------------|------------------|---------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical          | Method: EPA | \ 8082A Mod      | Preparation   | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <57.2               | ug/kg       | 251              | 5 <b>7</b> .2 | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <57.2               | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <57.2               | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <57.2               | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 1060                | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 1080                | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 200J                | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 11096-82-5 |      |
| PCB, Total               | 2340                | ug/kg       | 251              | 57.2          | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 1336-36-3  |      |
| Surrogates               |                     | 5 0         |                  |               |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 73                  | %           | 60-140           |               | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 93                  | %           | 60-140           |               | 5    | 02/27/18 06:56 | 02/28/18 10:57 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical          | Method: Pad | e Gender Typi    | ing           |      |                |                |            |      |
| Gender                   | Male                |             |                  |               | 1    |                | 02/15/18 15:50 |            |      |
| Lipid                    | Anal <b>y</b> tical | Method: Pac | e Li <b>p</b> id |               |      |                |                |            |      |
| Lipid                    | 0.16                | %           | 0.030            | 0.030         | 1    |                | 02/27/18 07:05 |            |      |

#### REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Sample: TD3-170612-01-SMB-01

Lab ID: 40151542006

Collected: 06/12/17 16:01 Received: 06/13/17 09:30 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL             | MDL         | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-----------------|-------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod   F | Preparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <34.2      | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <34.2      | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <34.2      | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <34.2      | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 564        | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 357        | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 11097-69-1 |      |
| PCB-1260 (Arodor 1260)   | 101J       | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 11096-82-5 |      |
| PCB, Total               | 1020       | ug/kg       | 150             | 34.2        | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 1336-36-3  |      |
| Surrogates               |            |             |                 |             |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 64         | %           | 60-140          |             | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 77         | %           | 60-140          |             | 3    | 02/27/18 06:56 | 02/28/18 11:13 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi   | ng          |      |                |                |            |      |
| Gender                   | Female     |             |                 |             | 1    |                | 02/15/18 15:50 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid         |             |      |                |                |            |      |
| Lipid                    | 0.62       | %           | 0.030           | 0.030       | 1    |                | 02/27/18 07:05 |            |      |





#### ORGANIC ANALYSIS SUPPORT DOCUMENTATION

| E            | SI project name:  | GEHR RAMP                     | Reviewed by:               | JA 5/31/18  |
|--------------|-------------------|-------------------------------|----------------------------|---|
| Sample (     | Collection Dates: | 6/13/17                       | Approved by:               | wan   |
|              | Job Number:       | 20115678.H000                 | Completion Date:           | 1 (18   |
| F            | Project Manager:  | Meg Michell                   | <del></del>                | -6/10   |
|              | Laboratory:       | Pace GB                       | Applicable Sample No's (X) | Refer to Table 1 in the<br>Quality Assurance Review |
|              |                   |                               | Sample No.                 | Lab Control No.                                     |
| Deliverable: | CLP (Full)        | ( )                           | Refer to Table 1           |   |
|              | Level IV (Full)   | ( )                           |                            |   |
|              | Limited           | ( )                           |                            |   |
|              | Other:            | Full Per Phase 2<br>RAMP QAPP |                            |   |

|   | Crit  | Criteria Examined in Detail             |   |   | Problems Identified                     |   | Support Documentation<br>Attachments                      |  |   |       |   |                                |            |      |
|---|---|---|---|---|---|---|---|--|---|-------|---|--------------------------------|------------|------|
| The following table indicates criteria that were examined, the identified problems, | Check (√) if Yes or Footnote<br>Letter for Comments Below |   |   | Check (√) if Yes or Footnote<br>Letter for Comments Below |   |   | Check (√) if Yes or Footnote<br>Letter for Comments Below |  |   |       |   |                                |            |      |
| and support documentation attachments   | 8082A   |   |   |   |   | 8082A                                   |   |  |   | 8082A |   |                                |            | 2.00 |
| Holding Times   | Х   |   |   |   |   |   |   |  |   | Х     |   |                                |            |      |
| Blank Analysis: Target Cmpds  | Х   |   |   |   |   |   |   |  |   | X     |   |                                |            |      |
| Sys Montr Cmps/Surrogates   | X   |   |   |   |   |   |   |  |   | X     |   |                                |            |      |
| Matrix Spike/Matrix Spike Duplicate   | X   |   |   |   |   |   |   |  |   | Х     |   |                                |            | >    |
| Blank Spike   | Х   |   |   |   |   |   |   |  |   | Х     |   |                                |            |      |
| Duplicate Analysis ( ) Field (X) Lab  | X   |   |   |   |   |   |   |  |   | Х     |   |                                |            |      |
| Detection Limit/Sensitivity   |   |   |   |   |   | •••••                                   |   |  |   |       |   |                                | •          |      |
| Qualitative Identification: Target Cmpds  | Х   | •                                       |   |   |   |   | ***************************************                   |  |   | Х     |   |                                | <u>.</u>   |      |
| Qualitative Identification: TICs  |   |   |   |   |   |   |   |  |   |       |   |                                |            |      |
| DFTPP & BFB Mass Tuning   |   | •                                       |   |   |   |   |   |  | <br>  |       |   |                                | ·          |      |
| GC Instrument Performance   |   |   |   |   |   |   |   |  |   |       |   |                                |            |      |
| Initial Calibrations  | X   |   |   |   |   |   |   |  |   | Х     |   |                                |            |      |
| Continuing Calibrations   | X   |   |   |   |   |   |   |  |   | Х     |   |                                | <br>[<br>[ |      |
| Quantitation of Results   | X   | •                                       |   |   |   | Χ                                       |   |  |   | Х     |   |                                |            |      |
| DDT/Endrin Breakdown  |   |   |   |   |   |   |   |  |   |       |   |                                | <u> </u>   |      |
| Surrogate Retention Time Shifts   | Х   |   |   |   |   | *************************************** |   |  |   | Х     |   | ****************************** | <u> </u>   |      |
| Internal Standards Performance  |   |   |   |   |   |   | 1   |  |   |       |   |                                | \$         |      |
| Resolution Check Standards  | 2.5   | **************************************  | 1 |   |   |   |   |  | <br>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |       |   |                                |            |      |
| Analytical Sequence   | X   |   |   |   |   |   |   |  |   | Х     |   |                                |            |      |
| Florisil Cartridge & GPC Calibration  |   | *************************************** |   |   | <u> </u>                                |   |   |  |   |       | *************************************** |                                | <b></b>    |      |
| GC Column Agreement   |   | <u> </u>                                |   |   |   |   | -   |  |   |       |   |                                |            |      |
| Condition Upon Receipt  | X   | <del> </del>                            |   |   |   |   | -   |  | <br><del></del>                             | Х     |   |                                |            |      |
| Percent Solids  |   |   |   |   |   |   |   |  |   |       |   | · <b></b>                      |            |      |
| Others:   | ***************************************                   | \$************************************* |   |   | \$************************************* |   | -   |  | <br>  |       |   |                                | }          |      |

| Comments: | Results < RL should be considered estimated. Total PCB results calculated with estimated Aroclor results should be |
|-----------|--|
|           | considered estimated.  |
|           |  |
|           |  |
|           |  |

### PCB - FORM II SVOA-1 TISSUE SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No.: 40151619 Contract: HUDSON RIVER REMEDIAL

Instrument ID: 40GCSJ

| LAB SAMPLE ID | SAMPLE NAME         | DCBP | TCMX |
|---------------|---------------------|------|------|
| 1662163       | 1662163BLANK        | 91   | 77   |
| 1662164       | 1662164LCS          | 91   | 78   |
| 1662165       | 1662165MS           | 90   | 84   |
| 1662166       | 1662166DUP          | 87   | 84   |
| 40151619001   | SW1-170613-01-YP-05 | 87   | 89   |
| 40151619002   | SW1-170613-01-YP-04 | 92   | 89   |
| 40151619003   | SW1-170613-01-YP-03 | 88   | 86   |
| 40151619004   | SW1-170613-01-YP-02 | 97   | 95   |
|               |                     |      |      |

QC LIMITS (60-140)

(60-140)

(DCBP) = Decachlorobiphenyl (S)

(TCMX) = Tetrachloro-m-xylene (S)

\* Values outside of QC Limits

Page 1 of 1

40151619



#### **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

QC Batch:

283977

Analysis Method:

EPA 8082A Mod

QC Batch Method:

EPA 3541

Analysis Description:

8082 GCS PCB

Associated Lab Samples:

40151619001, 40151619002, 40151619003, 40151619004

METHOD BLANK: 1662163

Matrix: Tissue

Associated Lab Samples:

40151619001, 40151619002, 40151619003, 40151619004

|                          |       | Blank  | Reporting |      |                |            |
|--------------------------|-------|--------|-----------|------|----------------|------------|
| Parameter                | Units | Result | Limit     | MDL  | Analyzed       | Qualifiers |
| PCB-1016 (Aroclor 1016)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | <11.4  | 50.0      | 11.4 | 03/23/18 13:57 |            |
| Decachlorobiphenyl (S)   | %     | 91     | 60-140    |      | 03/23/18 13:57 |            |
| Tetrachloro-m-xylene (S) | %     | 77     | 60-140    |      | 03/23/18 13:57 |            |

|                         |       | Spike | LCS    | LCS   | % Rec  |            |
|-------------------------|-------|-------|--------|-------|--------|------------|
| Parameter               | Units | Conc. | Result | % Rec | Limits | Qualifiers |
| CB-1016 (Aroclor 1016)  | ug/kg |       | <11.4  |       |        |            |
| CB-1221 (Aroclor 1221)  | ug/kg |       | <11.4  |       |        |            |
| CB-1232 (Aroclor 1232)  | ug/kg |       | <11.4  |       |        |            |
| CB-1242 (Aroclor 1242)  | ug/kg | 250   | 240    | 96    | 70-130 |            |
| CB-1248 (Aroclor 1248)  | ug/kg |       | <11.4  |       |        |            |
| CB-1254 (Aroclor 1254)  | ug/kg |       | <11.4  |       |        |            |
| CB-1260 (Aroclor 1260)  | ug/kg |       | <11.4  |       |        |            |
| ecachlorobiphenyl (S)   | %     |       |        | 91    | 60-140 |            |
| etrachloro-m-xylene (S) | %     |       |        | 78    | 60-140 |            |
| ornoro in Agierie (e)   | 70    |       |        | ,,    | /      |            |

|                          |         |             |       | ✓      |       |        |            |   |
|--------------------------|---------|-------------|-------|--------|-------|--------|------------|---|
| MATRIX SPIKE SAMPLE:     | 1662165 |             |       |        |       |        |            |   |
|                          |         | 40151619002 | Spike | MS     | MS    | % Rec  |            |   |
| Parameter                | Units   | Result      | Conc. | Result | % Rec | Limits | Qualifiers |   |
| PCB-1016 (Aroclor 1016)  | ug/kg   | <11.4       |       | <22.9  |       |        | 1q         | 5 |
| PCB-1221 (Aroclor 1221)  | ug/kg   | <11.4       |       | <22.9  |       |        | 7911       | ~ |
| PCB-1232 (Aroclor 1232)  | ug/kg   | <11.4       |       | <22.9  |       |        | see to     |   |
| PCB-1242 (Aroclor 1242)  | ug/kg   | <11.4       | 251   | 308    | /123/ | 70-130 | 700        |   |
| PCB-1248 (Aroclor 1248)  | ug/kg   | 284         |       | 439    |       |        |            |   |
| PCB-1254 (Aroclor 1254)  | ug/kg   | 183         |       | 209    |       |        |            |   |
| PCB-1260 (Aroclor 1260)  | ug/kg   | 41.4J       |       | 46.7J  |       |        |            |   |
| Decachlorobiphenyl (S)   | %       |             |       |        | 90    | 60-140 |            |   |
| Tetrachloro-m-xylene (S) | %       |             |       |        | 84    | 60-140 |            |   |
|                          |         |             |       |        | /     |        |            |   |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

#### REPORT OF LABORATORY ANALYSIS

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40151619 13 of 418



Page 14 of 19



#### **QUALITY CONTROL DATA**

Project:

**HUDSON RIVER REMEDIAL ACTION** 

Pace Project No.: 40151619

| SAMPLE DUPLICATE: 1662166 |       |             |        |     |     |            |
|---------------------------|-------|-------------|--------|-----|-----|------------|
|                           |       | 40151619002 | Dup    |     | Max |            |
| Parameter                 | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1221 (Aroclor 1221)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1232 (Aroclor 1232)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1242 (Aroclor 1242)   | ug/kg | <11.4       | <11.4  |     | 40  |            |
| PCB-1248 (Aroclor 1248)   | ug/kg | 284         | 305    | 7   | 40  |            |
| PCB-1254 (Aroclor 1254)   | ug/kg | 183         | 201    | 10  | 40  |            |
| PCB-1260 (Aroclor 1260)   | ug/kg | 41.4J       | 48.5J  |     | 40  |            |
| Decachlorobiphenyl (S)    | %     | 92          | 87     | 6   |     |            |
| Tetrachloro-m-xylene (S)  | %     | 89          | 84     | 5   |     |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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40151619 14 of 418



#### **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

QC Batch:

284080

Analysis Method:

Blank

Result

Pace Lipid

QC Batch Method:

Pace Lipid

Analysis Description:

LIPID

Associated Lab Samples:

40151619001, 40151619002, 40151619003, 40151619004

METHOD BLANK: 1662744

Matrix: Tissue

Associated Lab Samples:

40151619001, 40151619002, 40151619003, 40151619004

Parameter

Reporting Limit

MDL Analyzed Qualifiers

Lipid

Lipid

Lipid

Units %

< 0.030

0.70

03/23/18 06:20 0.030 0.030

MATRIX SPIKE SAMPLE:

Parameter

Parameter

1682565

%

Units

%

Units

40151619002 Result

Spike Conc.

MS Result

MS % Rec % Rec Limits

Qualifiers

SAMPLE DUPLICATE: 1662747

40151619002 Result

0.70

Dup Result

0.81

RPD

0.76

Max RPD

40

Qualifiers

14

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### PCB - FORM III SVOA-1 TISSUE SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Green Bay

Date Extracted: 03/22/2018

Instrument: 40GCSJ

Parent Sample ID: SW1-170613-01-YP-04

Matrix Spike - Sample No: 1662165MS

Date Analyzed (1): 03/27/2018

Lab File ID: 032718.B\032718007.D

SDG No.: 40151619

| COMPOUND                | SPIKE ADDED<br>(ug/kg) | SAMPLE<br>CONCENTRATION (ug/kg) | MS CONCENTRATION (ug/kg) | MS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|------------------------|---------------------------------|--------------------------|---------|----------------------|
| PCB-1242 (Aroclor 1242) | 251 🗸                  | <11.4                           | 308                      | 123     | 70-130               |

50 49.3 103% No 2041 For MS

See attached sprendsheet
For re-calc.

Spike Recovery: 0 out of 1 outside limits.

**Sample** SW1-170613-01-YP-04

Wt = 10.023 DF = 1

|       |        | Area    | Avg CF      | On Column       | Peak Result                | Aroclor Result          |
|-------|--------|---------|-------------|-----------------|----------------------------|-------------------------|
| A1242 | PCB-6  | 58356   | 2533198.700 | 0.02            | 11                         | <b>49</b> ug/kg         |
|       | PCB-7  | 281670  | 2520033.450 | 0.11            | 56                         |                         |
|       | PCB-8  | 1228019 | 7116457.950 | 0.17            | 86                         |                         |
|       | PCB-9  | 135317  | 3041534.650 | 0.04            | 22                         |                         |
|       | PCB-10 | 291719  | 2047746.900 | 0.14            | 71                         |                         |
|       |        |         |             | (Area / Avg CF) | (On Column * DF * 5000/Wt) | (Avg of 5 Peak Results) |

### Recalc MS %Rec

Spike Added 251 ug/kg Sample Conc. 49 ug/kg MS Conc. 308 ug/kg

MS %Rec **103%** 

### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

| SAMPLE NO. |  |
|------------|--|
| DUP        |  |

| Lab Name: Pac  | e Analytical - Green Bay          | Contract: HUDSON RIVER REMEDIAL A | CTION |  |  |
|--|-----------------------------------|-----------------------------------|-------|--|--|
| Date Received:   | 06/14/2017 1 <del>5:21</del> 9950 | Matrix: Tissue SDG No.: 40151619  | )     |  |  |
|  | 03/22/2018 07:22                  | Lab Sample ID: 1662166            |       |  |  |
| Date Analyzed:   | 03/23/2018 17:23                  | Lab File ID: 032318.B\032318019.D |       |  |  |
| Initial wt/vol: 9.9773 g Final wt/vol: 5 mL Dilution: 1 V Instrument: 40GCSJ Percent M |                                   |                                   |       |  |  |
| CAS NO.  | COMPOUND                          | CONCENTRATION UNITS: ug/kg        | Q     |  |  |
| 12674-11-2   | PCB-1016 (Aroclor 1016)           | <11.4                             | U     |  |  |
| 11104-28-2   | PCB-1221 (Aroclor 1221)           | <11.4                             | U     |  |  |
| 11141-16-5   | PCB-1232 (Aroclor 1232)           | <11.4                             | U     |  |  |
| 53469-21-9   | PCB-1242 (Aroclor 1242)           | <11.4                             | U     |  |  |
| 12672-29-6   | PCB-1248 (Aroclor 1248)           | 305                               |       |  |  |
| 11097-69-1   | PCB-1254 (Aroclor 1254)           | 201                               |       |  |  |
| 11096-82-5   | PCB-1260 (Aroclor 1260)           | 48.5                              | 1     |  |  |

## PCB - FORM III SVOA-1 TISSUE SEMI-VOLATILE SAMPLE/DUPLICATE RECOVERY

| Duplicate Sample No: 40151619002DUP |
|-------------------------------------|
| Date Analyzed: 03/23/2018           |
| Lab File ID: 032318.B\032318019.D   |
| SDG No.: 40151619                   |
|                                     |

| COMPOUND                | SAMPLE<br>CONCENTRATION (ug/kg) | DUPLICATE<br>CONCENTRATION (ug/kg) | RPD | RPD<br>LIMITS |
|-------------------------|---------------------------------|------------------------------------|-----|---------------|
| PCB-1016 (Aroclor 1016) | <11.4                           | <11.4                              |     | 0-40          |
| PCB-1221 (Aroclor 1221) | <11.4                           | <11.4                              |     | 0-40          |
| PCB-1232 (Aroclor 1232) | <11.4                           | <11.4                              |     | 0-40          |
| PCB-1242 (Aroclor 1242) | <11.4                           | <11.4                              |     | 0-40          |
| PCB-1248 (Aroclor 1248) | 284                             | 305                                | 7 🕶 | 0-40          |
| PCB-1254 (Aroclor 1254) | 183                             | 201 🗸                              | 10  | 0-40          |
| PCB-1260 (Aroclor 1260) | 41.4J                           | 48.5J 🗸                            |     | 0-40          |

## PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analyti | cal - Gre | en Bay Ir          | nstrument ID:     | 40GCSJ              | _GC Colum     | n: Col 1   | SDG No.: 401    | 51619 |
|------------------------|-----------|--------------------|-------------------|---------------------|---------------|------------|-----------------|-------|
| Calibration Date(s):   | 03/06/20  | 18 03/06           | /2018             | (                   | Calibration T | ime(s):    | 12:07           | 19:39 |
| LAB FILE ID            |           |                    |                   |                     |               |            |                 |       |
| CAL1A = 030618.B\030   | 618058.D  | CAL1               | IB = <u>03061</u> | 8.B\030618022       | 2.D (         | CAL1C = 03 | 30618.B\0306180 | )46.D |
| CAL1D = 030618.B\030   | 618034.D  | CAL1               | IF = 03061        | 8.B\030618010.D     |               | CAL2A = 03 | 30618.B\0306180 | 060.D |
| CAL2B = 030618.B\030   | 618024.D  | CAL                | 2C = 03061        | 8.B\030618048       | 3.D (         | CAL2D = 03 | 30618.B\0306180 | 36.D  |
| CAL2F = 030618.B\030   | 618012.D  | CAL3               | BA = 03061        | 8.B\030618062       | 2.D (         | CAL3B = 03 | 30618.B\0306180 | )26.D |
| CAL3C = 030618.B\030   | 618050.D  | CAL                | BD = 03061        | 8.B\030618038       | 3.D (         | CAL3F = 03 | 30618.B\0306180 | )14.D |
| CAL4A = 030618.B\030   | 618064.D  | ) CAL <sup>2</sup> | 4B = 03061        | 8.B\030618028       | 3.D (         | CAL4C = 03 | 30618.B\0306180 | )52.D |
| CAL4D = 030618.B\030   | 618040.D  | ) CAL <sup>2</sup> | F = 03061         | 8.B\030618016       | S.D (         | CAL5A = 03 | 30618.B\0306180 | )66.D |
| CAL5B = 030618.B\030   | 618030.D  | CAL5               | SC = 03061        | 8.B\030618054       | 1.D (         | CAL5D = 03 | 30618.B\0306180 | )42.D |
| CAL5F = 030618.B\030   | 618018.D  | )                  |                   |                     |               |            |                 |       |
| COMPOUND               | PEAK      | CURVE TYPE         | CAL1              | CAL2                | CAL3          | CAL4       | CAL5            |       |
| Aroclor 1016           | 1         | Averaged           | 3346700.00        | 3270300.00          | 3026998.00    | 2916970.00 | 2843185.00      |       |
| Aroclor 1016           | 2         | Averaged           | 3361310.00        | 3225075.00          | 3064774.00    | 2953430.00 | 2890423.00      |       |
| Aroclor 1016           | 3         | Averaged           | 9619090.00        | 9294970.00          | 8629258.00    | 8432580.00 | 8333033.00      |       |
| Aroclor 1016           | 4         | Averaged           | 4072990.00        | 3972810.00          | 3750126.00    | 3581221.25 | 3523970.00      |       |
| Aroclor 1016           | 5         | Averaged           | 2912980.00        | 2694260.00          | 2551278.00    | 2433447.50 | 2424781.00      |       |
| Aroclor 1221           | 1         | Averaged           | 1168840.00        | 1110755.00          | 980478.000    | 981937.500 | 964273.000      |       |
| Aroclor 1221           | 2         | Averaged           | 612180.000        | 587450.000          | 526622.000    | 511427.500 | 501535.000      | ,     |
| Aroclor 1221           | 3         | Averaged           | 1505110.00        | 1446635.00          | 1316246.00    | 1333917.50 | 1314775.00      |       |
| Aroclor 1221           | 4         | Averaged           | 1181440.00        | 1150255.00          | 1038526.00    | 1067413.75 | 1091213.00      |       |
| Aroclor 1221           | 5         | Averaged           | 3492190.00        | 3470535.00          | 3167038.00    | 3088411.25 | 3058814.00      |       |
| Aroclor 1242           | 1         | Averaged           | 2772560.00        | 2688000.00          | 2505132.00    | 2371062.50 | 2329239.00      |       |
| Aroclor 1242           | 2         | Averaged           | 2739500.00        | 2600755.00          | 2506348.00    | 2392166.25 | 2361398.00      |       |
| Aroclor 1242           | 3         | Averaged           | 7695890.00        | 7473100.00          | 6971326.00    | 6735328.75 | 6706645.00      |       |
| Aroclor 1242           | 4         | Averaged           | 3287540.00        | 3169245.00          | 3017986.00    | 2875101.25 | 2857801.00      |       |
| Aroclor 1242           | 5         | Averaged           | 2247420.00        | 2077595.00          | 2062930.00    | 1928282.50 | 1922507.00      |       |
| Aroclor 1248           | 1         | Averaged           | 2522640.00        | 2478140.00          | 2346396.00    | 2184111.25 | 2183582.00      |       |
| Aroclor 1248           | 2         | Averaged           | 4441400.00        | 4466680.00          | 4104774.00    | 3847133.75 | 3891542.00      |       |
| Aroclor 1248           | 3         | Averaged           | 2175950.00        | 2100970.00          | 2034380.00    | 1911980.00 | 1927121.00      |       |
| Aroclor 1248           | 4         | Averaged           | 5384910.00        | 5302865.00          | 5054976.00    | 4695606.25 | 4748871.00      |       |
| Aroclor 1248           | 5         | Averaged           | 3757360.00        | <b>/</b> 3770200.00 | 3588002.00    | 3386248.75 | 3440920.00      |       |
| Aroclor 1254           | 1         | Averaged           | 5783370.00        | 5652575.00          | 5120584.00    | 4858101.25 | 4761607.00      |       |
| Aroclor 1254           | 2         | Averaged           | 4616750.00        | 4581855.00          | 4225042.00    | 4064631.25 | 4016994.00      |       |
| Aroclor 1254           | 3         | Averaged           | 8435240.00        | 8286960.00          | 7623568.00    | 7277021.25 | 7207530.00      |       |
| Aroclor 1254           | 4         | Averaged           | 5140880.00        | 5151350.00          | 4826428.00    | 4638268.75 | 4591491.00      |       |
| Aroclor 1254           | 5         | Averaged           | 7015020.00        | 6981970.00          | 6368818.00    | 6122333.75 | 6047377.00      |       |
| Aroclor 1260           | 1         | Averaged           | 9569990.00        | 9323545.00          | 8657528.00    | 8388552.50 | 8372147.00      |       |
| Aroclor 1260           | 2         | Averaged           | 10746610.0        | 10429350.0          | 9816406.00    | 9526972.50 | 9552528.00      |       |
| Aroclor 1260           | 3         | Averaged           | 5052370.00        | 4986225.00          | 4721308.00    | 4577403.75 | 4561709.00      |       |
| Aroclor 1260           | 4         | Averaged           | 3131020.00        | 3037915.00          | 2887698.00    | 2771190.00 | 2747730.00      |       |

### PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name                     | : Pace Analytic                  | al - Gre | en Bay I         | nstrument ID:     | 40GCSJ           | _GC Columr     | : Col 1              | _SDG No.: 401                 | 51619      |
|------------------------------|----------------------------------|----------|------------------|-------------------|------------------|----------------|----------------------|-------------------------------|------------|
| Calibration                  | Date(s):0                        | 3/06/20  | 18 03/06         | /2018             |                  | Calibration Ti | me(s):               | 12:07                         | 19:39      |
| LAB FILE                     | ID                               |          |                  |                   |                  |                |                      |                               |            |
| CAL1A = 030618.B\030618058.D |                                  | CAL      | 1B = <u>0306</u> | 618.B\030618022.D |                  | AL1C = 0       | 030618.B\030618046.D |                               |            |
| CAL1D =                      | 030618.B\0306                    | 318034.D | CAL              | 1F = <u>0306</u>  | 8.B\03061801     | D.D C          | AL2A = 0             | 030618.B\030618               | 060.D      |
| CAL2B =                      | CAL2B = 030618.B\030618024.D     |          | CAL              | 2C = <u>0306</u>  | 8.B\03061804     | <u>3.D</u> C   | AL2D = 0             | = <u>030618.B\030618036.D</u> |            |
| CAL2F =                      | AL2F = 030618.B\030618012.D      |          | CAL              | 3A = <u>0306</u>  | 18.B\030618062.D |                | AL3B = 0             | 030618.B\030618026.D          |            |
| CAL3C =                      | 3C = <u>030618.B\030618050.D</u> |          | CAL              | 3D = <u>0306</u>  | 18.B\030618038.D |                | AL3F = 0             | 030618.B\030618               | 014.D      |
| CAL4A =                      | AL4A = 030618.B\030618064.D      |          | CAL              | 4B = <u>0306</u>  | 8.B\03061802     | 8.D C          | AL4C = <u>0</u>      | )30618.B\030618               | 052.D      |
| CAL4D =                      | 030618.B\0306                    | 18040.D  | CAL              | 4F = <u>0306</u>  | 18.B\030618016.D |                | AL5A = <u>0</u>      | )30618.B\030618               | 066.D      |
| CAL5B =                      | 030618.B\0306                    | 618030.D | CAL              | 5C = <u>0306</u>  | 18.B\030618054.D |                | AL5D = 0             | 30618.B\030618                | 042.D      |
| CAL5F =                      | 030618.B\0306                    | 18018.D  |                  |                   |                  |                |                      |                               | 7          |
| сомрои                       | ND                               | PEAK     | CURVE TYPE       | CAL1              | CAL2             | CAL3           | CAL4                 | CAL5                          |            |
| Aroclor 12                   | 60                               | 5        | Averaged         | 2853590.00        | 2718235.00       | 2625044.00     | 2511683.7            | 5 2485127.00                  | <b>V</b> , |
| Decachlor                    | obiphenyl (S)                    |          | Averaged         | 125223400.        | 114228350.       | 106255020.     | 101602250            | 0. 100490933.                 |            |
| Tetrachlor                   | o-m-xylene                       |          | Averaged         | 126550100.        | 124974300.       | 121144740.     | 121809550            | 0. 121996840.                 |            |

## PCB - FORM VI SVOA-3 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analyt | ical - Gre                    | en Bay I   | nstrument ID     | : 40GCSJ      | GC Colu     | ımn: Col 1 | SDG No.     | : 40151619 |
|-----------------------|-------------------------------|------------|------------------|---------------|-------------|------------|-------------|------------|
| Calibration Date(s):  | 03/06/20                      | 18 03/06   | 5/2018           |               | Calibration | Time(s):   | 12:07       | 19:39      |
| LAB FILE ID           |                               |            |                  |               |             |            |             |            |
| CAL1A = 030618.B\030  | 0618058.D                     | CAL        | 1B = <u>0306</u> | 18.B\03061802 | 2.D         | CAL1C =    | 030618.B\03 | 30618046.D |
| CAL1D = 030618.B\030  | = <u>030618.B\030618034.D</u> |            | 1F = 0306        | 18.B\03061801 | 0.D         | CAL2A =    | 030618.B\03 | 30618060.D |
| CAL2B = 030618.B\030  | 0618024.D                     | CAL        | 2C = 0306        | 18.B\03061804 | 8.D         | CAL2D =    | 30618036.D  |            |
| CAL2F = 030618.B\030  | D618012.D                     | CAL        | 3A = 0306        | 18.B\03061806 | 2.D         | CAL3B =    | 030618.B\03 | 30618026.D |
| CAL3C = 030618.B\030  | 0618050.D                     | CAL        | 3D = 0306        | 18.B\03061803 | 8.D         | CAL3F =    | 030618.B\03 | 30618014.D |
| CAL4A = 030618.B\030  | 0618064.D                     | CAL        | 4B = 0306        | 18.B\03061802 | 8.D         | CAL4C =    | 030618.B\03 | 30618052.D |
| CAL4D = 030618.B\030  | 0618040.D                     | CAL        | 4F = 0306        | 18.B\03061801 | 6.D         | CAL5A =    | 030618.B\03 | 30618066.D |
| CAL5B = 030618.B\030  | 0618030.D                     | CAL        | 5C = 0306        | 18.B\03061805 | 4.D         | CAL5D =    | 030618.B\03 | 30618042.D |
| CAL5F = 030618.B\030  | 0618018.D                     | )          |                  |               |             |            |             |            |
| COMPOUND              | PEAK                          | CURVE TYPE | %RSD             | R2            | A1          | A2         | A           | 3          |
| Aroclor 1016          | 1                             | Averaged   | 7.12             |               |             | 308083     | 0.60        |            |
| Aroclor 1016          | 2                             | Averaged   | 6.26             |               |             | 309900     | 2.40        |            |
| Aroclor 1016          | 3                             | Averaged   | 6.38             |               |             | 886178     | 6.20        |            |
| Aroclor 1016          | 4                             | Averaged   | 6.32             |               |             | 378022     | 3.45        |            |
| Aroclor 1016          | 5                             | Averaged   | 7.86             |               |             | 260334     | 9.30        |            |
| Arocior 1221          | 1                             | Averaged   | 8.88             |               |             | 104125     | 6.70        |            |
| Aroclor 1221          | 2                             | Averaged   | 8.95             |               |             | 547842     | 2.90        |            |
| Aroclor 1221          | 3                             | Averaged   | 6.31             |               |             | 138333     | 6.70        |            |
| Aroclor 1221          | 4                             | Averaged   | 5.33             |               |             | 110576     | 9.55        |            |
| Aroclor 1221          | 5                             | Averaged   | 6.45             |               |             | 325539     | 7.65        |            |
| Aroclor 1242          | 1                             | Averaged   | 7.64             |               |             | 253319     | 8.70        |            |
| Aroclor 1242          | 2                             | Averaged   | 6.15             |               |             | 252003     | 3.45        |            |
| Aroclor 1242          | 3                             | Averaged   | 6.27             |               |             | 711645     | 7.95        |            |
| Aroclor 1242          | 4                             | Averaged   | 6.12             |               |             | 304153     | 4.65        |            |
| Aroclor 1242          | 5                             | Averaged   | 6.50             |               |             | 204774     | 6.90        |            |
| Aroclor 1248          | 1                             | Averaged   | 6.78             | /             |             | 234297     | 3.85        |            |
| Aroclor 1248          | 2                             | Averaged   | 7.08             | 1             |             | 415030     | 5.95        |            |
| Aroclor 1248          | 3                             | Averaged   | 5.55             | <b>V</b>      |             | 203008     | 0.20        |            |
| Aroclor 1248          | 4                             | Averaged   | 6.21             |               |             | 503744     | 5.65        |            |
| Aroclor 1248          | 5                             | Averaged   | 4.91             |               |             | 358854     | 6.15        |            |
| Aroclor 1254          | 1                             | Averaged   | 8.82             |               |             | 523524     | 7.45        |            |
| Aroclor 1254          | 2                             | Averaged   | 6.58             |               |             | 430105     | 4.45        |            |
| Aroclor 1254          | 3                             | Averaged   | 7.31             |               |             | 7766063    | 3.85        |            |
| Aroclor 1254          | 4                             | Averaged   | 5.48             |               |             | 4869683    | 3.55        |            |
| Aroclor 1254          | 5                             | Averaged   | 7.13             |               |             | 650710     | 3.75        |            |
| Aroclor 1260          | 1                             | Averaged   | 6.23             |               |             | 8862352    | 2.50        |            |
| Aroclor 1260          | 2                             | Averaged   | 5.46             |               |             | 1001437    | 3.30        |            |
| Aroclor 1260          | 3                             | Averaged   | 4.78             |               |             | 477980     | 3.15        |            |
| Aroclor 1260          | 4                             | Averaged   | 5.71             |               |             | 2915110    | 0.60        |            |

# PCB - FORM VI SVOA-4 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name                     | : Pace Analytic                       | al - Gre             | en Bay   | In                    | strum                            | ent ID:            | 40GCSJ                | GC C   | olumr   | : <u>Col 1</u>               | SI                  | DG No.: <u>401</u> | 51619 |
|------------------------------|---------------------------------------|----------------------|----------|-----------------------|----------------------------------|--------------------|-----------------------|--------|---------|------------------------------|---------------------|--------------------|-------|
| Calibration                  | Date(s):(                             | 03/06/20             | 18       | 03/06/2018 Calibratio |                                  |                    | ion Ti                | me(s): |         | 12:07                        | 19:39               |                    |       |
| LAB FILE                     | ID                                    |                      |          |                       |                                  |                    |                       |        |         |                              |                     |                    |       |
| CAL1A = 030618.B\030618058.D |                                       | )                    | CAL1     | B =                   | 03061                            | 8.B\0306180        | 22.D                  | c      | AL1C =  | 030618.B\030618046.D         |                     | 046.D              |       |
| CAL1D =                      | 030618.B\030                          | 618034.D             | <u> </u> | CAL1                  | F=                               | 03061              | 8.B\0306180           | 10.D   | c       | AL2A =                       | 030                 | 618.B\030618       | 060.D |
| CAL2B =                      | 030618.B\0306                         | 618024.D             | 1        | CAL2                  | C =                              | 03061              | 8.B\0306180           | 48.D   | C       | AL2D =                       | 030                 | 618.B\030618       | 036.D |
| CAL2F =                      | 030618.B\030618012.D                  |                      | )        | CAL3                  | 3A =                             | 03061              | 18.B\030618062.D      |        | C       | AL3B =                       | 030618.B\030618026. |                    | 026.D |
| CAL3C =                      | 030618.B\030                          | 030618.B\030618050.D |          | CAL3D = <u>03061</u>  |                                  | 0618.B\030618038.D |                       | c      | AL3F =  | 030                          | 618.B\030618        | 014.D              |       |
| CAL4A =                      | 030618.B\0306                         | 618064.D             | )        | CAL4                  | AL4B = <u>030618.B\030618028</u> |                    |                       | 28.D   | c       | AL4C =                       | 030                 | 618.B\030618       | 052.D |
| CAL4D =                      | 030618.B\0306                         | 618040.D             | 1        | CAL4F = 030618        |                                  |                    | 18.B\030618016.D CAL5 |        |         | AL5A =                       | 030                 | 618.B\030618       | 066.D |
| CAL5B =                      | 030618.B\0306                         | 618030.D             | )        | CAL5                  | iC =                             | 03061              | 8.B\0306180           | 54.D   | C       | CAL5D = 030618.B\030618042.D |                     | 042.D              |       |
| CAL5F =                      | 030618.B\0306                         | 618018.D             | l        |                       |                                  |                    |                       |        |         |                              |                     |                    |       |
| сомрои                       | ND                                    | PEAK                 | CURVE -  | TYPE                  | %R                               | RSD                | R2                    | A      | 1       | A2                           |                     | A3                 |       |
| Aroclor 12                   | 60                                    | 5                    | Averaç   | ged 5.76              |                                  | .76                |                       |        |         | 2638735                      | 5.95                |                    |       |
| Decachlor                    | obiphenyl (S)                         |                      | Averaç   | iged 9.39             |                                  | .39                |                       |        |         | 1095599                      | 90.6                |                    |       |
| Tetrachlor                   | · · · · · · · · · · · · · · · · · · · |                      | Averaç   | 9                     |                                  |                    |                       |        | 1232951 | 06.0                         |                     |                    |       |



## PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name: Pace Analy         | tical - Gree | en Bay | _ Instrume   | ent ID: 40G0 | CSJGC      | C Column:                  | Col 1                | SDG No.: <u>4</u> | 0151619 |  |
|------------------------------|--------------|--------|--------------|--------------|------------|----------------------------|----------------------|-------------------|---------|--|
| Calibration Date(s):         | 03/06/20     | 18 03/ | 06/2018      |              | Calib      | oration Time               | e(s):                | 12:07             | 19:39   |  |
| LAB FILE ID                  |              |        |              | _            |            |                            |                      |                   |         |  |
| CAL1A = 030618.B\03          | 0618058.D    | C/     | AL1B =       | 030618.B\030 | 0618022.D  | CAL1C = 030618.B\030618046 |                      |                   | 18046.D |  |
|                              |              | AL1F = | 030618.B\030 |              | CAL        |                            | 030618.B\030618060.D |                   |         |  |
| CAL2B = 030618.B\03          |              |        | AL2C =       | 030618.B\030 |            | CAL                        |                      | 0618.B\0306       |         |  |
| CAL2F = 030618.B\03          |              |        | AL3A =       | 030618.B\030 |            | CAL                        |                      | 0618.B\03061      |         |  |
| CAL3C = 030618.B\03          |              |        | AL3D =       | 030618.B\030 | 12.7 - 11. | CAL                        |                      | 0618.B\03061      |         |  |
| CAL4A = 030618.B\03          |              |        | AL4B =       | 030618.B\030 | ·          | CAL                        | -                    | 0618.B\03061      |         |  |
| CAL4D = 030618.B\03          |              |        | AL4F =       | 030618.B\030 |            | CAL                        |                      | 0618.B\03061      |         |  |
| CAL5B = 030618.B\030618030.D |              |        |              |              |            |                            |                      |                   |         |  |
|                              |              |        |              |              |            |                            |                      |                   |         |  |
| COMPOUND                     | DEAK         | CALA   | CALO         | CALO         | CALA       | CALE                       | рт                   | RT WI             | NDOW    |  |
| COMPOUND                     | PEAK         | CAL1   | CAL2         | CAL3         | CAL4       | CAL5                       | RT                   | FROM              | ТО      |  |
| Aroclor 1016                 | 1            | 3.318  | 3.317        | 3.317        | 3.317      | 3.318                      | 3.318                | 3.284             | 3.352   |  |
| Aroclor 1016                 | 2            | 3.513  | 3.513        | 3.512        | 3.512      | 3.512                      | 3.512                | 3.478             | 3.546   |  |
| Aroclor 1016                 | 3            | 3.826  | 3.826        | 3.826        | 3.826      | 3.826                      | 3.826                | 3.792             | 3.86    |  |
| Aroclor 1016                 | 4            | 3.928  | 3.929        | 3.928        | 3.929      | 3.928                      | 3.929                | 3.895             | 3.963   |  |
| Aroclor 1016                 | 5            | 3.995  | 3.994        | 3.994        | 3.995      | 3.994                      | 3.994                | 3.96              | 4.028   |  |
| Aroclor 1221                 | 1            | 1.803  | 1.804        | 1.804        | 1.804      | 1.806                      | 1.804                | 1.77              | 1.838   |  |
| Aroclor 1221                 | 2            | 2.406  | 2.407        | 2.407        | 2.407      | 2.407                      | 2.407                | 2.373             | 2.441   |  |
| Aroclor 1221                 | 3            | 2.687  | 2.688        | 2.688        | 2.688      | 2.688                      | 2.688                | 2.654             | 2.722   |  |
| Aroclor 1221                 | 4            | 2.789  | 2.789        | 2.79         | 2.789      | 2.789                      | 2.789                | 2.755             | 2.823   |  |
| Aroclor 1221                 | 5            | 2.851  | 2.851        | 2.851        | 2.851      | 2.851                      | 2.851                | 2.817             | 2.885   |  |
| Aroclor 1242                 | 1            | 3.318  | 3.318        | 3.317        | 3.318      | 3.318                      | 3.318                | 3.284             | 3.352   |  |
| Aroclor 1242                 | 2            | 3.513  | 3.513        | 3.513        | 3.513      | 3.513                      | 3.513                | 3.479             | 3.547   |  |
| Aroclor 1242                 | 3            | 3.826  | 3.826        | 3.827        | 3.827      | 3.827                      | 3.827                | 3.793             | 3.861   |  |
| Aroclor 1242                 | 4            | 3.928  | 3.929        | 3.929        | 3.93       | 3.929                      | 3.929                | 3.895             | 3.963   |  |
| Aroclor 1242                 | 5            | 3.995  | 3.994        | 3.995        | 3.995      | 3.994                      | 3.995                | 3.961             | 4.029   |  |
| Aroclor 1248                 | 1            | 4.261  | 4.261        | 4.261        | 4.261      | 4.261                      | 4.261                | 4.227             | 4.295   |  |
| Aroclor 1248                 | 2            | 4.546  | 4.545        | 4.545        | 4.545      | 4.545                      | 4.546                | 4.512             | 4.58    |  |
| Aroclor 1248                 | 3            | 4.814  | 4.813        | 4.813        | 4.813      | 4.813                      | 4.812                | 4.778             | 4.846   |  |
| Aroclor 1248                 | 4            | 4.879  | 4.878        | 4.879        | 4.878      | 4.879                      | 4.879                | 4.845             | 4.913   |  |
| Aroclor 1248                 | 5            | 5.037  | 5.036        | 5.037        | 5.038      | 5.037                      | 5.038                | 5.004             | 5.072   |  |
| Aroclor 1254                 | 1            | 5.163  | 5.162        | 5.163        | 5.162      | 5.163                      | 5.162                | 5.128             | 5.196   |  |
| Aroclor 1254                 | 2            | 5.408  | 5.407        | 5.407        | 5.407      | 5.407                      | 5.408                | 5.374             | 5.442   |  |
| Aroclor 1254                 | 3            | 5.51   | 5.51         | 5.51         | 5.509      | 5.51                       | 5.51                 | 5.476             | 5.544   |  |
| Aroclor 1254                 | 4            | 6.026  | 6.026        | 6.026        | 6.027      | 6.027                      | 6.027                | 5.993             | 6.061   |  |
| Aroclor 1254                 | 5            | 6.299  | 6.299        | 6.299        | 6.299      | 6.299                      | 6.299                | 6.265             | 6.333   |  |
| Aroclor 1260                 | 1            | 6.3    | 6.3          | 6.299        | 6.3        | 6.299                      | 6.3                  | 6.266             | 6.334   |  |
| Aroclor 1260                 | 2            | 7.006  | 7.006        | 7.005        | 7.005      | 7.005                      | 7.006                | 6.972             | 7.04    |  |
| Aroclor 1260                 | 3            | 7.252  | 7.252        | 7.251        | 7.252      | 7.251                      | 7.251                | 7.217             | 7.285   |  |

# PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name:                    | b Name: Pace Analytical - Green Bay Instrument ID: 40GCSJ GC Column: Col 1 SDG No.: 40151619 |          |        |           |              |           |                 |                      |                      |        |
|------------------------------|--|----------|--------|-----------|--------------|-----------|-----------------|----------------------|----------------------|--------|
| Calibration                  | Date(s):0  | 3/06/20  | 18 0   | 3/06/2018 |              | Calib     | ration Time     | e(s):                | 12:07                | 19:39  |
| LAB FILE                     | ID   |          |        |           |              |           |                 |                      |                      |        |
| CAL1A = 030618.B\030618058.D |  |          |        | CAL1B =   | 030618.B\030 | 0618022.D | CAL             | 1C = 0               | 30618.B\03061        | 8046.D |
| CAL1D =                      | 030618.B\0306  | 518034.D |        | CAL1F =   | 030618.B\030 | 0618010.D | CAL             | 2A = 0               | 30618.B\03061        | 8060.D |
| CAL2B =                      | 030618.B\0306  | 618024.D |        | CAL2C =   | 030618.B\030 | 0618048.D | CAL             | 2D = 0               | 30618.B\03061        | 8036.D |
| CAL2F =                      | 030618.B\0306  | 618012.D |        | CAL3A =   | 030618.B\030 | 0618062.D | CAL             | 3B = <u>0</u>        | 30618.B\03061        | 8026.D |
| CAL3C =                      | CAL3C = 030618.B\030618050.D   |          |        | CAL3D =   | 030618.B\030 | 0618038.D | 18038.D CAL3F = |                      | 030618.B\030618014.D |        |
| CAL4A =                      | CAL4A = 030618.B\030618064.D   |          |        | CAL4B =   | 030618.B\030 | 0618028.D | CAL             | 4C = 0               | 30618.B\03061        | 8052.D |
| CAL4D =                      | CAL4D = 030618.B\030618040.D   |          |        | CAL4F =   | 030618.B\030 | 0618016.D | CAL             | 5A = <u>0</u>        | 30618.B\03061        | 8066.D |
| CAL5B =                      | 030618.B\0306  | 618030.D |        | CAL5C =   | 0618054.D    | CAL5D =   |                 | 030618.B\030618042.D |                      |        |
| CAL5F =                      | 030618.B\0306  | 618018.D |        |           |              |           |                 |                      |                      |        |
| 001                          | ADOUND   | DEAK     | 0.41.4 | 0.41.0    | 0.41.0       | 001.4     | CALE            | рт                   | RT WI                | NDOW   |
| CON                          | MPOUND   | PEAK     | CAL1   | CAL2      | CAL3         | CAL4      | CAL5            | RT                   | FROM                 | TO     |
| Aroclor 12                   | 60   | 4        | 7.444  | 7.443     | 7.443        | 7.443     | 7.443           | 7.443                | 7.409                | 7.477  |
| Aroclor 12                   | 60   | 5        | 7.902  | 7.9       | 7.901        | 7.901     | 7.9             | 7.901                | 7.867                | 7.935  |
| Decachlor                    | obiphenyl (S)  |          | 8.572  | 8.572     | 8.571        | 8.571     | 8.571           | 8.571                | 8.537                | 8.605  |
| Tetrachlor                   | o-m-xylene   |          | 2.485  | 2.484     | 2.484        | 2.484     | 2.485           | 2.484                | 2.45                 | 2.518  |

# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION DATA (SINGLE POINT)

| Lab Name:   | Pace Analytical - Green Bay | Instrument ID: | 40GCSJ | GC Column: Col 1     | SDG No.: 4 | 10151619 |
|-------------|-----------------------------|----------------|--------|----------------------|------------|----------|
| Calibration | Date(s):03/06/2018          |                |        | Calibration Time(s): | 11:50      |          |
| LAB FILE I  | D                           |                |        |                      |            |          |
| CAL3S =     | 030618.B\030618008.D        |                |        |                      |            |          |

| COMPOUND     | AMOUNT | DEAK | DT    | RT WII | RESPONSE |              |
|--------------|--------|------|-------|--------|----------|--------------|
|              | AMOUNT | PEAK | RT    | FROM   | ТО       | FACTOR       |
| Aroclor 1232 | .5     | 1    | 2.851 | 2.817  | 2.885    | 2500024.00   |
| Aroclor 1232 | .5     | 2    | 3.513 | 3.479  | 3.547    | 1339782.00   |
| Aroclor 1232 | .5     | 3    | 3.827 | 3.793  | 3.861    | 3749726.00 🗸 |
| Aroclor 1232 | .5     | 4    | 3.929 | 3.895  | 3.963    | 1606492.00   |
| Aroclor 1232 | .5     | 5    | 3.995 | 3.961  | 4.029    | 1091876.00   |

| 6                                       | Document Name:               | Document Revised:             |
|---|------------------------------|-------------------------------|
| Pace Analytical"                        | PCB Calibration Low Standard | 23-Apr-2018                   |
| 1 door mary trotal                      | Document No.:                | Issuing Authority:            |
| *************************************** | F-GB-O-155-Rev.00            | Pace Green Bay Quality Office |

# PCB Low Level Calibration % Difference Check

Lab Name: Pace Analytical - Green Bay
Instrument ID: 40GCSJ
Calibration Date: 3/6/2018

|             |            | Abundance     |              | Acceptance |           |
|-------------|------------|---------------|--------------|------------|-----------|
| Aroclor     | True Value | Concentration | % Difference | Criteria % | Pass/Fail |
| AR1221-CAL1 | .1,        | 0.109383      | 9.383        | 20         | Pass      |
| AR1242-CAL1 | .1         | 0.108828      | 8.828        | 20         | Pass      |
| AR1248-CAL1 | .1         | 0.106694      | 6.694        | 20         | Pass      |
| AR1254-CAL1 | .1676      | 0.10796       | 7.96         | 20         | Pass      |
| AR1016-CAL1 | .1         | 0.109056      | 9.056        | 20         | Pass      |
| AR1260-CAL1 | .1         | 0.10731       | 7.31         | 20         | Pass      |



40151619 208 of 418

SAMPLE NO. 10757904ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018

Time: 20:11

Instrument ID: 40GCSJ

GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

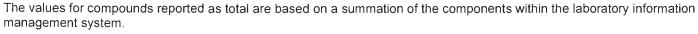
Lab File ID: 030618.B\030618070.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | DT    | RT WI | RT WINDOW |            | RRF or     | 0/ D    |        |
|------------------------|------|----------|-------|-------|-----------|------------|------------|---------|--------|
| COMPOUND               | PEAN | CURVE    | RT    | FROM  | TO        | Amount     | Amount     | %D      |        |
| Aroclor 1221           | 1    | Averaged | 1.804 | 1.77  | 1.838     | 1041256.70 | 1074308.00 | 3.1742  |        |
| Aroclor 1221           | 2    | Averaged | 2.407 | 2.373 | 2.441     | 547842.900 | 558458.000 | 1.9376  |        |
| Aroclor 1221           | 3    | Averaged | 2.688 | 2.654 | 2.722     | 1383336.70 | 1446642.00 | 4.5763  |        |
| Aroclor 1221           | 4    | Averaged | 2.789 | 2.755 | 2.823     | 1105769.55 | 1114194.00 | 0.7619  | ~      |
| Aroclor 1221           | 5    | Averaged | 2.851 | 2.817 | 2.885     | 3255397.65 | 3446964.00 | 5.8846  | $\neg$ |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605     | 109559990. | 106438520. | -2.8491 |        |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518     | 123295106. | 119469080. | -3.1031 |        |



SAMPLE NO.

10757932ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018

Time: 20:27 •

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 030618.B\030618072.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | RT    | RT WII | RT WINDOW |            | RRF or       | %D          |
|------------------------|------|----------|-------|--------|-----------|------------|--------------|-------------|
| COMPOUND               | PEAR | CURVE    | KI    | FROM   | TO        | Amount     | Amount       | 70 <b>D</b> |
| Aroclor 1242           | 1    | Averaged | 3.317 | 3.284  | 3.352     | 2533198.70 | 2574948.00   | 1.6481      |
| Aroclor 1242           | 2    | Averaged | 3.513 | 3.479  | 3.547     | 2520033.45 | 2587724.00   | 2.6861      |
| Aroclor 1242           | 3    | Averaged | 3.825 | 3.793  | 3.861     | 7116457.95 | 7162442.00 、 | 0.6462      |
| Aroclor 1242           | 4    | Averaged | 3.928 | 3.895  | 3.963     | 3041534.65 | 3109342.00   | 2.2294      |
| Aroclor 1242           | 5    | Averaged | 3.993 | 3.961  | 4.029     | 2047746.90 | 2082504.00   | 1.6973      |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537  | 8.605     | 109559990. | 100680260.   | -8.1049     |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45   | 2.518     | 123295106. | 117472720.   | -4.7223     |

SAMPLE NO. 10757923ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018 Time: 20:44

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 030618.B\030618074.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | DEAK | CURVE    | DT    | RT WII | NDOW  | RRF or     | RRF or     | 0/ D    |
|------------------------|------|----------|-------|--------|-------|------------|------------|---------|
| COMPOUND               | PEAK | CORVE    | RT    | FROM   | ТО    | Amount     | ر Amount   | %D      |
| Aroclor 1248           | 1    | Averaged | 4.261 | 4.227  | 4.295 | 2342973.85 | 2416006.00 | 3.1171  |
| Aroclor 1248           | 2    | Averaged | 4.545 | 4.512  | 4.58  | 4150305.95 | 4272006.00 | 2.9323  |
| Aroclor 1248           | 3    | Averaged | 4.813 | 4.778  | 4.846 | 2030080.20 | 2145142.00 | 5.6678  |
| Aroclor 1248           | 4    | Averaged | 4.879 | 4.845  | 4.913 | 5037445.65 | 5257174.00 | 4.3619  |
| Aroclor 1248           | 5    | Averaged | 5.037 | 5.004  | 5.072 | 3588546.15 | 3781714.00 | 5.3829  |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537  | 8.605 | 109559990. | 103468660. | -5.5598 |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45   | 2.518 | 123295106. | 117995220. | -4.2985 |

SAMPLE NO.

10757930ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018 Time: 21:00

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 030618.B\030618076.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | DEAK | OLIDVE   | DT    | RT WII | NDOW  | RRF or     | RRF or                      | %D      |
|------------------------|------|----------|-------|--------|-------|------------|-----------------------------|---------|
| COMPOUND               | PEAK | CURVE    | RT    | FROM   | ТО    | Amount     | Amount                      | %D      |
| Aroclor 1254           | 1    | Averaged | 5.162 | 5.128  | 5.196 | 5235247.45 | 4908596.00                  | -6.2395 |
| Aroclor 1254           | 2    | Averaged | 5.406 | 5.374  | 5.442 | 4301054.45 | 4023996.00                  | -6.4416 |
| Aroclor 1254           | 3    | Averaged | 5.51  | 5.476  | 5.544 | 7766063.85 | 7114120.00                  | -8.3948 |
| Aroclor 1254           | 4    | Averaged | 6.026 | 5.993  | 6.061 | 4869683.55 | <b>4</b> 559312.00 <b>√</b> | -6.3735 |
| Aroclor 1254           | 5    | Averaged | 6.299 | 6.265  | 6.333 | 6507103.75 | 6351522.00                  | -2.3910 |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537  | 8.605 | 109559990. | 103892160.                  | -5.1733 |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45   | 2.518 | 123295106. | 119128800.                  | -3.3791 |



10757911ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 21:16

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 030618.B\030618078.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | RT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | FEAR | CORVE    | KI    | FROM  | TO    | Amount     | Amount     | 70D     |   |
| Aroclor 1016           | 1    | Averaged | 3.317 | 3.284 | 3.352 | 3080830.60 | 3151828.00 | 2.3045  |   |
| Aroclor 1016           | 2    | Averaged | 3.512 | 3.478 | 3.546 | 3099002.40 | 3167044.00 | 2.1956  |   |
| Aroclor 1016           | 3    | Averaged | 3.826 | 3.792 | 3.86  | 8861786.20 | 9017370.00 | 1.7557  |   |
| Aroclor 1016           | 4    | Averaged | 3.928 | 3.895 | 3.963 | 3780223.45 | 3853260.00 | 1.9321  |   |
| Aroclor 1016           | 5    | Averaged | 3.994 | 3.96  | 4.028 | 2603349.30 | 2572474.00 | -1.1860 | ٦ |
| Aroclor 1260           | 1    | Averaged | 6.3   | 6.266 | 6.334 | 8862352.50 | 8433522.00 | -4.8388 | ٦ |
| Aroclor 1260           | 2    | Averaged | 7.005 | 6.972 | 7.04  | 10014373.3 | 10338502.0 | 3.2366  |   |
| Aroclor 1260           | 3    | Averaged | 7.251 | 7.217 | 7.285 | 4779803.15 | 4863954.00 | 1.7606  | 7 |
| Aroclor 1260           | 4    | Averaged | 7.442 | 7.409 | 7.477 | 2915110.60 | 2985660.00 | 2.4201  |   |
| Aroclor 1260           | 5    | Averaged | 7.901 | 7.867 | 7.935 | 2638735.95 | 2816390.00 | 6.7325  |   |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605 | 109559990. | 104964120. | -4.1948 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 118641800. | -3.7741 | ٦ |

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

05/10/2018 4:46

40151619 213 of 418

SAMPLE NO.

10860013CCV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/23/2018 Time: 13:25

Instrument ID: 40GCSJ

GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 032318.B\032318004.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | DT    | RT WI | RT WINDOW |            | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-----------|------------|------------|---------|
| COMPOUND               | FEAR | CORVE    | RT    | FROM  | TO        | Amount     | Amount     | 700     |
| Aroclor 1242           | 1    | Averaged | 3.317 | 3.284 | 3.352     | 2533198.70 | 2546654.00 | 0.5312  |
| Aroclor 1242           | 2    | Averaged | 3.513 | 3.479 | 3.547     | 2520033.45 | 2528060.00 | 0.3185  |
| Aroclor 1242           | 3    | Averaged | 3.826 | 3.793 | 3.861     | 7116457.95 | 7066942.00 | -0.6958 |
| Aroclor 1242           | 4    | Averaged | 3.929 | 3.895 | 3.963     | 3041534.65 | 3028536.00 | -0.4274 |
| Aroclor 1242           | 5    | Averaged | 3.994 | 3.961 | 4.029     | 2047746.90 | 2011672.00 | -1.7617 |
| Decachlorobiphenyl (S) |      | Averaged | 8.569 | 8.537 | 8.605     | 109559990. | 104280400. | -4.8189 |
| Tetrachloro-m-xvlene   |      | Averaged | 2 484 | 2 45  | 2 518     | 123295106  | 118932640  | -3.5382 |



The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

05/10/2018 4:46

SAMPLE NO.

10860015CCV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/23/2018

Time: 16:35

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 032318.B\032318016.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | ОТ    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D    |           |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|-----------|
| COMPOUND               | PEAR | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |           |
| Aroclor 1248           | 1    | Averaged | 4.261 | 4.227 | 4.295 | 2342973.85 | 2443730.00 | 4.3004  |           |
| Aroclor 1248           | 2    | Averaged | 4.544 | 4.512 | 4.58  | 4150305.95 | 4277822.00 | 3.0724  | ٦         |
| Aroclor 1248           | 3    | Averaged | 4.811 | 4.778 | 4.846 | 2030080.20 | 2160242.00 | 6.4117  |           |
| Aroclor 1248           | 4    | Averaged | 4.878 | 4.845 | 4.913 | 5037445.65 | 5300408.00 | 5.2202  | ٦         |
| Aroclor 1248           | 5    | Averaged | 5.036 | 5.004 | 5.072 | 3588546.15 | 3797570.00 | 5.8248  | $\exists$ |
| Decachlorobiphenyl (S) |      | Averaged | 8.568 | 8.537 | 8.605 | 109559990. | 110950540. | 1.2692  |           |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45  | 2.518 | 123295106. | 122703060. | -0.4802 | 7         |



SAMPLE NO.

10860014CCV

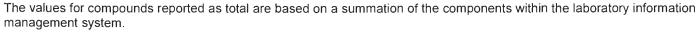
Lab Name: Pace Analytical - Green Bay Calibration Date: 03/23/2018 Time: 19:45

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 032318.B\032318028.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | RT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | FEAR | CURVE    | ΚI    | FROM  | TO    | Amount     | Amount     | 700     |   |
| Aroclor 1254           | 1    | Averaged | 5.161 | 5.128 | 5.196 | 5235247.45 | 5353588.00 | 2.2605  |   |
| Aroclor 1254           | 2    | Averaged | 5.406 | 5.374 | 5.442 | 4301054.45 | 4439574.00 | 3.2206  |   |
| Aroclor 1254           | 3    | Averaged | 5.508 | 5.476 | 5.544 | 7766063.85 | 7987178.00 | 2.8472  |   |
| Aroclor 1254           | 4    | Averaged | 6.024 | 5.993 | 6.061 | 4869683.55 | 5231188.00 | 7.4236  | 7 |
| Aroclor 1254           | 5    | Averaged | 6.297 | 6.265 | 6.333 | 6507103.75 | 6840038.00 | 5.1165  |   |
| Decachlorobiphenyl (S) |      | Averaged | 8.568 | 8.537 | 8.605 | 109559990. | 111402260. | 1.6815  |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 122415920. | -0.7131 |   |



SAMPLE NO. 10850752CCV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/27/2018

Time: 13:55 ✔

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 032718.B\032718004.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40151619

| COMPOUND               | PEAK | CURVE    | ΡТ    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D             |
|------------------------|------|----------|-------|-------|-------|------------|------------|------------------|
| COMPOUND               | PEAR | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D               |
| Aroclor 1221           | 1    | Averaged | 1.804 | 1.77  | 1.838 | 1041256.70 | 973054.000 | -6.5500 <b>v</b> |
| Aroclor 1221           | 2    | Averaged | 2.407 | 2.373 | 2.441 | 547842.900 | 513248.000 | -6.3147          |
| Aroclor 1221           | 3    | Averaged | 2.688 | 2.654 | 2.722 | 1383336.70 | 1293026.00 | -6.5285          |
| Aroclor 1221           | 4    | Averaged | 2.789 | 2.755 | 2.823 | 1105769.55 | 1008344.00 | -8.8107          |
| Aroclor 1221           | 5    | Averaged | 2.851 | 2.817 | 2.885 | 3255397.65 | 3070240.00 | -5.6877          |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537 | 8.605 | 109559990. | 97313000.0 | -11.1783         |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45  | 2.518 | 123295106. | 115912980. | -5.9874          |



# PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10850753CCV

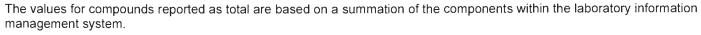
Lab Name: Pace Analytical - Green Bay Calibration Date: 03/27/2018 Time: 17:05

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 032718.B\032718016.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40151619

| COMPOUND               | DEAK | CHD)/E   | DT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |
| Aroclor 1232           | 1    | Averaged | 2.85  | 2.817 | 2.885 | 2500024.00 | 2681994.00 | 7.2787  |
| Aroclor 1232           | 2    | Averaged | 3.513 | 3.479 | 3.547 | 1339782.00 | 1400658.00 | 4.5437  |
| Aroclor 1232           | 3    | Averaged | 3.826 | 3.793 | 3.861 | 3749726.00 | 4023370.00 | 7.2977  |
| Aroclor 1232           | 4    | Averaged | 3.928 | 3.895 | 3.963 | 1606492.00 | 1720932.00 | 7.1236  |
| Aroclor 1232           | 5    | Averaged | 3.994 | 3.961 | 4.029 | 1091876.00 | 1148408.00 | 5.1775  |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537 | 8.605 | 109559990. | 105022320. | -4.1417 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 119771560. | -2.8578 |



218 of 418

# Pace Analytical Prep Log Report

Batch Information: OEXT 283977 PCB-B

| Prep Method         | EPA 3541     |
|---------------------|--------------|
| Spiked By           | AMC          |
| Instrument          | 40BALL       |
| Hexane/Acetone 1:1  | 191930       |
| 3620B Date/Initials | 03/23/18 AMC |
| Reviewed By         | BLM          |

| Analysis Method     | EPA 8082A Mod           |
|---------------------|-------------------------|
| Spiked By Date/Time | 03/22/2018 07:22:48:165 |
| Conc. Temp #1       | 40                      |
| Hexane              | 188917                  |
| H2SO4 - Conc.       | 179360                  |
| Reviewed By Date    | 04/06/2018 08:42        |

| Template Vers               | ion: F-GB-O-113- | Rev.04 (14Mar2018)     |
|-----------------------------|------------------|------------------------|
| Extracted By                | AMC              | Extracted Date/T       |
| Witnessed By                | ЕТВ              | Witnessed By Date/Time |
| Conc. Temp #2               | 40               | Methylene Chlori       |
| Sodium Sulfate              | 190952           | Florisil               |
| Acid 3665A<br>Date/Initials | 03/23/18 AMC     | Tuna                   |
| Batch Notes                 |                  |                        |

| (                         |                         |
|---------------------------|-------------------------|
| Extracted Date/Time       | 03/22/2018 07:22:46:430 |
| Witnessed By<br>Date/Time | 03/22/2018 07:22:48:165 |
| Methylene Chloride        | None Added              |
| Florisil                  | 186910                  |
| Tuna                      | None Added              |
|                           |                         |

|       | QC Rule | Sample Type | Lab Sample ID | Initial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)    | AR1242-SPK<br>(mL) |
|-------|---------|-------------|---------------|--------------------|----------------------|--------------------------|--------------|-----------------|--------------------|
| 8082A | TNYP    | BLANK       | 1662163       | 10                 | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | LCS         | 1662164       | 10                 | 5                    | 3                        |              | 189973<br>(.25) | 182336<br>(.125)   |
| 8082A | TNYP    | PS          | 40151552011   | 9.9626             | 5                    | 3                        |              | 189973<br>(.25) | (.123)             |
|       | TNYP    | PS          | 40151597001   | 9.9992             | 5                    | 3                        |              | 189973<br>(.25) |                    |
|       | TNYP    | PS          | 40151605001   | 10.0092            | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | PS          | 40151605002   | 9.9923             | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | PS          | 40151614001   | 10.0203            | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | PS          | 40151616001   | 9.9967             | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | PS          | 40151619001   | 9.9791             | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | RQS         | 40151619002   | 10.0233            | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | MS          | 1662165       | 9.9608             | 5                    | 3                        |              | 189973<br>(.25) | 182336<br>(.125)   |
| 8082A | TNYP    | DUP         | 1662166       | 9.9773             | 5                    | 3                        |              | 189973<br>(.25) | (.123)             |
| 8082A | TNYP    | PS          | 40151619003   | 10.0185            | 5                    | 3                        |              | 189973<br>(.25) |                    |
| 8082A | TNYP    | PS          | 40151619004   | 9.9887             | 5                    | 3                        | 10.71        | 189973<br>(.25) |                    |
| 8082A | TNYP    | PS          | 40151800001   | 10.0159            | 5                    | 3                        | 7-77-10-4    | 189973<br>(.25) | :                  |
| 8082A | TNYP    | PS          | 40151800002   | 9.968              | 5                    | 3                        |              | 189973<br>(.25) |                    |

Thu, 10 May 2018 16:46:15 -0500

# Pace Analytical Prep Log Report

| OC Rule    | Sample Type | Lab Sample ID | nitial Weight (g) | Final Volume<br>mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)    | AR1242-SPK<br>(mL) |
|------------|-------------|---------------|-------------------|---------------------|--------------------------|--------------|-----------------|--------------------|
| 8082A TNYP | PS          | 40151800003   | 9.9637            | 5                   | 3                        |              | 189973<br>(.25) |                    |
| 8082A TNYP | PS          | 40151800004   | 10.0193           | 5                   | 3                        |              | 189973<br>(.25) |                    |
| 8082A TNYP | PS          | 40151804001   | 9.9711            | 5                   | 3                        |              | 189973<br>(.25) |                    |
| 8082A TNYP | PS          | 40151804002   | 9.9758            | 5                   | 3                        |              | 189973<br>(.25) |                    |
| 8082A TNYP | PS          | 40151804003   | 9.9638            | 5                   | 3                        |              | 189973<br>(.25) |                    |
| B082A TNYP | PS          | 40151804009   | 10.0066           | 5                   | 3                        |              | 189973<br>(.25) |                    |
| 3082A TNYP | PS          | 40151804010   | 10.0363           | 5                   | 3                        |              | 189973<br>(.25) |                    |

## Standard Notes:

Standard Notes: 30 182336: Ar1242 Spike @20ug/mL 40GCS9. Of 41

189973: Pest/PCB Surrogate Spike 40GCSC.

|          |      |   |  |   |                  |        |              |                  |             |       |  |         |         |                         |                 | · savoano |       |         |       |     |        |             |
|----------|------|---|--|---|------------------|--------|--------------|------------------|-------------|-------|--|---------|---------|-------------------------|-----------------|-----------|-------|---------|-------|-----|--------|-------------|
|          |      |   |  | Sequen                                  | ce Nam           | e: C:  | \msdcl       | nem\1\           | sequ        | ence  | 10306  | 18.s    |         |                         |                 |           |       | · · ·   |       |     |        |             |
|          |      |   |  |   | Commen<br>perato | t:     |              |                  |             |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   |  | Dai                                     | ta Pat           | h: C:  | \M\$DC!      |                  |             | 1030  | 618\   |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   |  | trument<br>a Anal                       |                  |        |              | ed Cma<br>ed Cma |             |       |  |         | ,       |                         |                 |           |       |         |       |     |        |             |
|          |      |   |  | trumeni                                 |                  | ral D  | net-Se       | ar Cmd           | *           |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   |  | a Anal;                                 |                  |        |              | eq Cmd           |             |       |  |         |         |                         |                 |           |       | _       |       |     |        | ļ           |
|          |      |   |  | Method                                  | d Sect           | ions ' | ľo Rur       | 1                | Seq         | uenc  | e Baro   | ode     | Opt     | ions                    |                 |           |       |         |       |     |        |             |
|          |      |   |  | (X) F                                   | ill Me<br>eproce | thod   |              |                  | (X)         | On    | Mismat<br>Mismat   | ch,     | Inj     | ect .                   | Anywa:<br>niect | Y         |       | .9.14   |       |     |        |             |
|          |      |   |  | ( ) 10                                  | proce            | 221113 | OHLY         |                  | ( )         | Bar   | code   | Disab   | oled    | 1                       |                 |           |       |         |       |     |        |             |
|          |      |   |  | Line                                    |                  |        |              | Sample           | Nam         | e/Mi  | sc Inf   | 0       |         |                         |                 |           |       |         |       |     |        | ļl          |
|          |      |   |  | Unlin                                   |                  | 1      | prin         | ne               |             |       |  |         |         |                         |                 |           |       |         | 40000 |     |        |             |
| <u> </u> |      |   | ٠,   | Data                                    | file             |        | 0306         | 518001           |             |       |  |         |         |                         |                 |           |       | ***     |       |     |        |             |
|          |      |   | 3)   | Metho<br>Sample                         |                  | 2      | prin         | IOTA20<br>ne     | 1 /         |       |  |         |         |                         |                 |           |       | ···     | -     |     |        |             |
|          |      |   |  | Data                                    |                  |        |              | 518002<br>COTA20 |             |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 4)   | RearSa                                  | amp              | 3      | HEXA         | NE               |             |       |  |         |         |                         |                 |           |       |         | 1     |     |        |             |
| <b></b>  |      |   |  | Data                                    | od               |        | GEB1         | 518003<br>[OTA20 | 17          |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
| ļ        |      |   | 5)   | Sample                                  |                  | 4      | HEXA<br>0306 | ANE<br>518004    |             |       |  |         |         |                         |                 |           |       | ***     |       |     |        |             |
|          |      |   |  | Metho                                   | od               | r      | GEB1         | OTA20            |             | 5530  | 1,174  | iaa x   | AZE     |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 6)   | RearSa                                  | Eile             | ٥      | 0306         | 518005           |             | ودرر  | englika iki 8 M  | ناړېرن  | ·       |                         |                 |           |       |         | 2747  |     |        |             |
|          |      |   | 7)   | Metho<br>Sample                         |                  | 4      | GEB1<br>HEXA | OTAZŰ<br>NE      | 17          |       |  |         |         |                         |                 |           |       | ***     |       |     |        |             |
|          |      |   |  | Data                                    |                  |        |              | 518006<br>COTA20 | 17          |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 8.)  | RearSa                                  | qme              | 6      | 1221         | -CAL1            |             | 8138  | 11,174   | 99,1    | 1SA     |                         |                 |           |       | •       |       |     |        |             |
|          |      |   |  | Data:<br>Metho                          |                  |        | GEB1         | 518007<br>COTA20 |             |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 9)   | Sample<br>Data:                         |                  | 5      |              | 2-CAL3           |             | 5539  | 1,174  | 198,1   | ISA     |                         |                 |           |       | ***     |       |     |        |             |
|          |      |   | 10)  | Metho                                   | od               | -      | GEB1         | OTA20            | 17          | 01.20 |  | iaa n   | 152     |                         |                 |           |       | ***     |       |     |        |             |
|          |      |   | 1.0)   | RearSa<br>Datai                         |                  | /      | 0306         | 518009           |             | 9133  | :1,174   | 177,1   | Y.J.M.  |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 117  | Metho<br>Sample                         |                  | 6      | GEB1         | COTA20           | 17<br>F, 18 | 8138  | :1,174   | 198,1   | ISA     |                         |                 |           |       |         |       |     |        |             |
|          |      |   |  | Data                                    | Eile             |        | 0306         | 518010<br>OTA20  |             |       |  |         |         |                         |                 |           |       | -       |       |     |        |             |
|          |      |   | 12)  | Metho<br>RearSa                         | qme              | 8      | 1221         | -CAL3            |             | 5538  | 1:1,174  | 199,1   | )SA     |                         |                 |           |       | •       |       |     |        | -           |
|          |      |   |  | Data:<br>Metho                          |                  |        | GEB1         | 518011<br>COTA20 | 17          |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 13)  | Sample<br>Data:                         |                  | 7      |              | -CAL2            | F,18        | 8139  | :1,174   | 198,1   | ISA     |                         |                 |           |       |         |       |     |        |             |
|          |      |   |  | Metho                                   | od               | 0      | GEBI         | OTA20            |             | 97.40 | 174  | ioidi k | 355     |                         |                 |           |       | •       |       |     |        |             |
|          |      |   | T # 1;   | RearSa                                  |                  | 9      | 0306         | 518013           |             | 0.140 | 1:1,174  | 122,1   | 100     |                         |                 |           |       |         | -     |     |        |             |
|          |      |   | 151  | Metho                                   |                  | 8      |              | OTA20            |             | 5538  | :1,174   | 1,80    | ISA     |                         |                 |           |       |         |       |     |        | <b>—</b>    |
|          |      |   | NT C   | Datai                                   | file             |        | 030€         | 018014<br>0TA20  |             |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 16)  | RearSa                                  | qmp              | 10     | 1221         | -CAL5            | F,18        | 8141  | :1,174   | 199,1   | ISA     |                         |                 |           |       | •       |       |     |        |             |
|          |      |   | :  | Data:                                   | od               |        | GEBI         | 518015<br>OTA20  |             |       |  |         |         |                         |                 |           |       |         |       |     |        | -1          |
|          |      |   | 17)  | Sample<br>Datai                         |                  | 9      |              | -CAL4            |             | 8140  | 1:1,174  | 1,861   | 1SA     |                         |                 |           |       |         |       |     |        | -           |
|          |      |   | 101  | Metho                                   | od               | 11     | GEBI         | OTA20            |             |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 10)  | Datai                                   | Tile             | **     | 0306         | 18017            | 4 ***       |       |  |         |         |                         |                 |           |       |         |       |     |        |             |
|          |      |   | 19)  | Metho<br>Sample                         | 2                | 10     | 1221         |                  |             | 8141  | :1,174   | 1,98,1  | ISA     |                         |                 |           |       |         | -     |     |        | $\neg \neg$ |
|          |      |   |  | Data:                                   |                  |        |              | 18018<br>OTA20   | 17          |       |  |         |         |                         |                 |           |       |         |       |     |        | -           |
|          |      |   | 20)  | RearSa                                  |                  | 12     |              |                  |             | 8132  | :1,174   | 1,66    | 1SA     |                         |                 |           |       |         |       |     |        |             |
|          |      |   | :  | Last Mo                                 | difie            | d: Tue | e Mar        | 06.10            | :58:        | 59 2  | 018  |         |         |                         |                 | Pag       | e;    | 1       |       |     |        |             |
|          |      |   |  | *************************************** | -                | [ ]    | 1            | ***              |             |       | and all the same of the same o | -       |         |                         | B               | ME        | 3/17  | /18     |       |     |        |             |
|          |      |   |  |   |                  |        |              |                  |             | 1     | A  |         | <b></b> | $  \uparrow \uparrow  $ |                 | Conti     | inued | on Page |       | 5   |        |             |
|          | L    |   | <u>i l l l l l l l l l l l l l l l l l l l</u> |   |                  |        |              | <b></b>          |             |       |  |         | I       |                         |                 | .i        |       |         |       |     |        |             |
|          |      |   |  | 1                                       | 1                |        |              |                  |             |       | Read an  | ia Und  | ersto   | 000 By                  | ſ               |           |       |         |       |     |        |             |
| T        | 2    |   | m  |   |                  |        | I            | 7/18             |             |       |  |         |         | 2                       |                 |           |       | 2       | /-    | //  | ,<br>> |             |
|          | بعلا | 1 | 1, 10  | gned                                    |                  | ······ | _21          | Date             | )           | _     |  |         | -       | Signe                   | d               | ****      |       |         | D     | ate |        | -           |
|          |      | I | 71   | /                                       |                  |        |              |                  |             |       |  |         |         | ~                       |                 |           |       |         |       |     |        |             |

|                |   |              | And Annual Andrews                      | 100                                     |   | Para Agranda A |          | 000  |                | MARL LOGIC |         | and the same of th | manana. | About the same   |      | - Constitution | - Constitution |              | of its columns of | hornooph |      |      |       |              |  |            |   |
|----------------|---|--------------|---|---|---|--|----------|------|----------------|------------|---------|--|---------|--|------|----------------|----------------|--------------|-------------------|----------|------|------|-------|--------------|--|------------|---|
|                |   | t            |   | Datafi                                  |   |  |          |      | 8019<br>TA201  | . ~        |         |  |         |  |      |                |                |              |                   |          |      |      |       | 20000        |  | 1          | 1                                       |
| -              | -   | +            | 21)                                     | Method<br>Sample                        | 1   | 11   | н        | EXAN | E              | 1 /        |         |  |         |  |      |                |                |              |                   |          |      |      |       |              | 1  | <u> </u>   | 1                                       |
|                |   | 1            |   | Datafi<br>Method                        |   |  |          |      | 8020<br>TA201  | 17         |         |  |         |  |      | 1 <b>y</b>     |                |              |                   |          |      |      |       |              | ļ  | ļ          | -                                       |
|                | ***************************************   |              | 22)                                     | RearSam                                 | p   | 13   | 12       | 242- | CAL2E          |            | 3554    | 43:1   | 1,174   | 199.N  | SA   |                |                |              |                   |          |      |      |       |              |  |            | To Describe the second                  |
|                |   | -            |   | Datafi<br>Method                        |   |  |          |      | 8021<br>TA201  | 17         |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            | 1                                       |
|                | ļ   | -            | 23)                                     | Sample<br>Datafi                        | 1.0   | 12   |          |      | CAL1E<br>8022  | 3, 1,8     | 8813    | 32:1   | 1,174   | 198, N   | SA   |                |                |              |                   |          |      |      |       |              | -  |            | -                                       |
|                |   |              |   | Method                                  |   |  | GE       | ВІО  | TA201          |            |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              | 24)                                     | RearSam<br>Datafí                       |   | 14   |          |      | CAL3E<br>8023  | 3,18       | 3554    | 14:3   | ,174    | 199, N   | SA   |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   | -            | 261                                     | Method<br>Sample                        |   | 1.2  |          |      | TA201          |            | 255/    | 13-1   | 17/     | 198, N   | a o  |                |                |              |                   |          |      |      |       | ,            | -  |            |   |
|                |   | _            | 23;                                     | Datafi                                  |   | 15   | 03       | 3061 | 8024           |            | ,,,,,,  | 1  |         | 1 20 , 11,   | .,,  |                |                |              |                   |          |      |      |       |              | -  | -          | -                                       |
|                |   |              | 26)                                     | Method<br>RearSam                       |   | 15   |          |      | TA201<br>CAL4E |            | 3554    | 15:1   | ,174    | 199, N   | SA   |                |                |              |                   |          |      |      |       |              | A de constitution de constitut |            |   |
| -              |   | -            | _ ,                                     | Datafi                                  | le  |  | 0.3      | 3061 | 8025<br>TA201  |            |         |  |         |  |      |                |                |              |                   |          |      |      |       | 3-Anthon     | -  |            |   |
|                |   | -            | 27)                                     | Method<br>Sample                        |   | 14   | 12       | 242- | CAL3E          |            | 3554    | 4:1  | ,174    | 198, N   | SA   |                |                |              |                   |          |      |      |       |              | 1  |            |   |
|                |   |              |   | Datafi<br>Method                        |   |  |          |      | 8026<br>TA201  | 7          |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            |   |
| AAAAAAAAAAAA   |   |              | 28)                                     | RearSam                                 | p.  | 16   | 12       | 42-  | CAL5E          |            | 3554    | 6:1  | ,174    | 199, N   | SA   |                |                |              |                   |          |      |      |       |              |  |            | *************************************** |
| 1              |   | -            |   | Datafi<br>Method                        |   |  | GE       | BIO  | 8027<br>TA201  |            |         |  |         |  |      |                |                |              |                   |          |      |      |       | *            | 1  |            |   |
| -              |   | -            | 29.)                                    | Sample<br>Datafi                        | l e   | 1.5  |          |      | CAL4E<br>8028  | 3,18       | 3554    | 15:1   | ,174    | 198, NS  | SA   |                |                |              |                   |          |      |      |       | 04-976       | ļ.,  |            | *************************************** |
| ar radional de |   |              | 201                                     | Method                                  |   | 1.7  | GE       | BIO  | TA201          | . 7        |         |  |         |  |      |                |                |              |                   |          |      |      |       |              | ## CO CO CO CO CO CO CO CO CO CO CO CO CO  |            |   |
|                |   |              | 30)                                     | RearSam<br>Datafi                       | le.   | 17   |          | XAN  | 8029           |            |         |  |         |  |      |                |                |              |                   |          |      |      |       |              | *  |            |   |
| -              |   |              | 314                                     | Method<br>Sample                        |   | 16   |          |      | TA201<br>CAL5B |            | 3554    | 6:1  | ,174    | 98,NS  | SA   |                |                |              |                   |          |      |      |       | -            | 1  |            |   |
|                |   |              | 0,,                                     | Datafi                                  |   |  | 03       | 061  | 8030           |            |         |  | •       |  |      |                |                |              |                   |          |      |      |       |              | -  |            |   |
|                |   |              | 32)                                     | Method<br>RearSam                       |   | 18   | 12       | 48-0 |                |            | 813     | 34:1   | ,174    | 99, NS   | SA:  |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              |   | Datafi<br>Method                        |   |  |          |      | 8031<br>TA201  | 7          |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              | 33)                                     | Sample                                  |   | 17   | HE       | XAN  | E              |            |         |  |         |  |      |                |                |              |                   |          |      |      |       | ***********  |  |            |   |
|                |   |              |   | Datafi.<br>Method                       |   |  | GE       | BIO  | 8032<br>TA201  |            |         |  |         |  |      |                |                |              |                   |          |      |      |       |              | ļ  |            |   |
|                |   |              | 34)                                     | RearSam<br>Datafi                       |   | 19   |          |      | CAL2D<br>8033  | ), 18      | 554     | 18:1   | ., 174  | 99, NS   | SA   |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              | 267                                     | Method                                  |   | 1.0  | GE       | BIO  | TA201          |            | 0013    | . A - 1  | 371     | OR NY  | a a  |                |                |              |                   |          |      |      |       | 7.700-07     |  |            |   |
| -              |   | _            | 35)                                     | Sample<br>Datafi                        | le  | 10   | 03       | 0618 | 8034           |            | 10 T 7  | 14 1   | ,1,4    | 98,NS  | ) N  |                |                |              |                   |          |      |      |       | •            | <u> </u>   |            | -                                       |
|                |   |              | 36)                                     | Method<br>RearSam                       |   | 20   |          |      | TA201<br>CAL3D |            | 554     | 9:1  | .174    | 99, NS   | SA   |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              | ,                                       | Datafi                                  | le  |  | 03       | 061  | 8035<br>FA201  |            |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   | intractory.  | 37)                                     | Method<br>Sample                        |   | 19   | 12       | 48-0 | CAL2D          |            | 554     | 8:1  | ,174    | 98, NS   | βA   |                |                |              |                   |          |      |      |       | ALC UND      | 1  | A##&A V WX |   |
|                |   |              |   | Datafi:<br>Method                       | le  |  |          |      | 8036<br>TA201  | 7          |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            | -                                       |
|                |   | _            | 38)                                     | RearSam,<br>Datafi                      |   | 21   |          |      | CAL4D<br>8037  | ,18        | 5,55    | 0:1  | ,174    | 99, NS   | SA.  |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              |   | Method                                  |   |  | GE       | BIO  | TA201          |            |         |  |         |  |      |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              | 39)                                     | Sample<br>Datafi                        | le  | 20   |          |      | CAL3D<br>8038  | , 18       | 1.5.54  | 9:1  | ,1/4    | 98, NS   | s A  |                |                |              |                   | ,        |      |      |       |              |  |            |   |
| -              |   |              | 40)                                     | Method<br>RearSam                       |   | 22   | GE<br>12 | BIO  | TA201          | 7          | 555     | 1.1  | . 174   | 99, NS   | SA.  |                |                |              |                   |          |      |      |       |              |  |            | -                                       |
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|                |   |              | 41)                                     | Method<br>Sample                        |   | 21   | 12       | 48-0 |                | ,18        | 555     | 0:1  | ,174    | 98,NS  | SA   |                |                |              |                   |          |      |      |       |              | -  |            | -                                       |
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|                |   | _            | 42)                                     | RearSamp                                |   | 23   | HE       | XANE | Ε              |            |         |  |         |  |      |                |                |              |                   |          |      |      |       | -            |  |            |   |
|                |   | -            | -                                       | Datafi:<br>Method                       | ī 6   |  | GE       | BIOT | rA201          |            |         |  |         | 00   | ,    |                |                |              |                   |          |      |      |       |              |  |            |   |
|                |   |              | 43)                                     | Sample<br>Datafil                       | le-   | 22   |          |      | CAL5D<br>8042  | ,18        | 555     | 1:1  | ,174    | 98,NS  | Αi   |                |                |              |                   |          |      |      |       |              |  |            | *************************************** |
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|     |      |   | 44)           | RearSamp<br>Datafile | 2.4           | 1254-CAL1C               | ,188135:       | 1,17499      | , NSA  |  |   |         |   |  |   |
|     |      |   |               | Method               |               | GEBIOTA201               | 7              |              | ,  |  |   |         | _   |  |   |
|     |      |   | 45)           | Sample<br>Datafile   |               | HEXANE<br>030618044      |                |              |  |  |   |         |   |  |   |
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|     | ···  |   | 46)           | RearSamp<br>Datafile |               | 030618045                | , 100000.      | 1,1000       | , 11571  |  |   |         |   |  |   |
|     |      |   | 471           | Method               | 24            | GEBIOTA201               | 7<br>. 188135: | 1.17498      | , NSA  |  |   |         |   |  |   |
|     |      |   | 47)           | Sample<br>Datafile   |               | 030618046                |                |              | ,  |  |   |         |   | 1  |   |
|     |      |   | 48)           | Method<br>RearSamp   | 26            | GEBIOTA201               | ,<br>185554:   | 1,17499      | , NSA  |  |   |         |   |  |   |
|     |      |   | 49,           | Datafile             |               | 030618047                |                |              |  |  |   |         |   |  |   |
|     |      |   | 491           | Method<br>Sample     | 25            | GEBIOTA201               | ,<br>,185553:  | 1,17498      | , NSA  |  |   |         |   |  |   |
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|     |      |   | 50)           | Method<br>RearSamp   | . 27          | GEBIOTA201               | ,<br>,185555r  | 1,17499      | , NSA  |  |   |         | _   |  |   |
|     |      |   |               | Datafile             | e             | 030618049<br>GEBIOTA201  |                |              |  |  |   |         |   |  |   |
|     |      |   | 51)           | Method<br>Sample     | 26            | 1254-CAL3C               | ,<br>185554:   | 1,17498      | , NSA  |  |   |         |   |  |   |
|     |      |   |               | Datafile             | 9             | 030618050<br>GEBIOTA201  | 7              |              |  |  |   |         | -   |  |   |
|     |      |   | 52.)          | Method<br>RearSamp   | 28            | 1254-CAL5C               | ,185556:       | 1,17499      | , NSA  |  |   |         |   |  |   |
|     |      |   |               | Datafile<br>Method   | е             | 030618051<br>GEBIOTA201  | 7              |              |  |  |   |         |   |  |   |
|     |      |   | 53)           | Sample               | 27            | 1254-CAL4C               | ,185555:       | 1,17498      | , NSA  |  |   |         | -   |  |   |
|     |      |   |               | Datafil<br>Method    | e             | 030618052<br>GEBIOTA201  | 7              |              |  |  |   |         |   |  |   |
|     |      |   | 54)           | RearSamp             | 29            | HEXANE                   |                |              |  |  |   |         |   |  |   |
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|     |      |   | 55)           | Sample               |               | 1254-CAL5C               | ,185556;       | 1,17498      | , NSA  |  | ,                                       |         |   |  |   |
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|     |      |   | 56)           | RearSamp             | 30            |                          | ,188136:       | 1,17499      | , AR1  |  |   |         | 1   |  | - |
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|     |      |   | 57)           | Sample               |               | HEXANE<br>030618056      |                |              |  |  |   |         | A   |  | 1 |
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|     |      |   | 5.8)          | RearSamp             |               | 1660-CAL2A<br>030618057  | ,185558:       | 1,17499      | , ARI  |  |   |         |   |  |   |
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|     |      |   | 59)           | Sample<br>Datafil    |               | 1660-CAL1A<br>030618058  | ,188136:       | 1,17498      | , ARI  |  |   |         | +   |  |   |
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| No. |      |   | 60)           | RearSamp<br>Datafil  |               | 1660-CAL3A<br>030618059  | , 185559:      | 1,1/499      | AKI  |  |   |         |   |  | 1 |
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|     |      |   | 61)           | Sample<br>Datafil    | 31<br>e       | 1660-CAL2A<br>030618060  | ,1000000:      | 1,1,450      | ,  |  |   |         | 1   |  |   |
|     |      |   | <i></i>       | Method               |               | GEBIOTA201<br>1660-CAL4A | 7<br>185560•   | 1.17499      | AR1  |  |   |         |   |  |   |
|     |      |   | 62}           | RearSamp<br>Datafil  |               | 030618061                |                | ~, 4 . 7 0 0 | ,  |  |   |         | 1   |  |   |
|     |      |   | 631           | Method<br>Sample     | 32            | GEBIOTA201<br>1660-CAL3A | 7<br>.185559:  | 1,17498      | ,AR1   |  |   |         | 1   |  |   |
|     |      |   | 637           | Datafil              |               | 030618062                |                |              |  |  |   |         | To a contract of the contract | _  |   |
| -   |      |   | 641           | Method<br>RearSamp   | 34            | GEBIOTA201<br>1660-CAL5A | ,185561:       | 1,17499      | , AR1  |  |   |         |   |  |   |
|     |      |   | 9, 13         | Datafil              |               | 030618063                |                |              |  |  |   |         | +   |  | - |
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|     |      |   | ,             | Datafil              | е             | 030618064<br>GEBIOTA201  |                |              |  |  |   |         |   |  |   |
|     |      |   | 66)           | Method<br>RearSamp   | 35            | HEXANE                   | ,              |              |  |  |   |         | 1   |  |   |
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| 2-)        | Method<br>Sample             | 2                                       | HEXANE   | AAAAAAA  | 200000000000000000000000000000000000000  |
| /          | Datafile                     |   | 032318002  |  | -  |
| 31         | Method<br>Sample             | 3                                       | GEBIOTA2017<br>HEXANE .  | 00000000   | -  |
| 3 /        | Datafile                     | 3                                       | 032318003  |  |  |
| <b>a</b> \ | Method                       | Λ                                       | GEBIOTA2017<br>1242-CCV,185544:1,17498,AR124 <b>**</b>                               |  | -  |
| 4)         | Sample<br>Datafile           | 4                                       | 032318004  | + incomment  | TWWWW.   |
| _          | Method                       | -                                       | GEBIOTA2017<br>1242-CCV,185544:1,17498,AR124   |  | -  |
| 5)         | Sample<br>Datafile           | 5                                       | 1242-CCV, 185544:1, 17498, AR124 000<br>032318005                                    |  | -  |
|            | Method                       | _                                       | GEBIOTA2017  | Regio estados de constantes de | -  |
| 6)         | Sample<br>Datafile           | 6                                       | 1662163,,17567,BIOTA 032318006   |  | -  |
|            | Method                       |   | GEBIOTA2017  |  |  |
| 7)         | Sample                       | 7                                       | 1662164,,17567,BIOTA<br>032318007  | 1  |  |
|            | Datafile<br>Method           |   | GEBIOTA2017  | 93.4   | _  |
| (8)        | Sample                       | 8                                       | 1002100,/1.00./  | de relacione   |  |
|            | Datafile<br>Method           |   | 032318008<br>GEBIOTA2017   |  | -  |
| 9)         | Sample                       | 9                                       | 40151552011 x4,,17567,BIOTA  | 0.000  |  |
|            | Datafile                     |   | 032318009<br>GEBIOTA2017   | PANAMANA.  |  |
| 10)        | Method<br>Sample             | 10                                      | 40151597001,,17567,BIOTA   |  | -  |
|            | Datafile                     |   | 032318010  | BANANA .   | ***************************************  |
| 11)        | Method<br>Sample             | 11                                      | GEBIOTA2017<br>40151605001,,17567,BIOTA  |  | ٦  |
| /          | Datafile                     |   | 032318011  |  | 4  |
| 12)        | Method<br>Sample             | 12                                      | GEBIOTA2017<br>40151605002 x2,,17567,BIOTA   | MANAAAAAAAAAAAAAA  |  |
| 12,        | Datafile                     |   | 032318012  |  |  |
| 1.23       | Method<br>Sample             | 13                                      | GEBIOTA2017<br>40151614001,,17567,BIOTA  | 1  | _  |
| 1.3 )      | Datafile                     | 13                                      | 032318013  | na dheadh  | 90,000,000   |
|            | Method                       | 1.4                                     | GEBIOTA2017<br>40151616001,,17567,BIOTA  |  | -  |
| 14)        | Sample<br>Datafile           | 14                                      | 032318014  | An in water  |  |
|            | Method                       | 1.5                                     | GEBIOTA2017  | 40000  |  |
| 15)        | Sample<br>Datafile           | 15                                      | 40151619001,,17567,BIOTA<br>032318015  |  | -  |
|            | Method                       |   | GEBIOTA2017  |  | -  |
| 16)        | Sample<br>Datafile           | 16                                      | 1248-CCV, 185549: 1, 17498, AR124  |  |  |
|            | Method                       |   | GERIOTA 2017   |  | -  |
| 17)        | Sample<br>Datafile           | 17                                      | 1248-CCV,185549:1,17498,AR124 AL<br>032318017  |  |  |
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| 18)        | Sample                       | 18                                      | 40151619002,,17567,BIOTA<br>032318018  |  |  |
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| 19)        | Sample<br>Datafile           | 19                                      | 032318019  |  | 1  |
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| The state of the s   | Method                 | GEBIOTA2017<br>20 40151619003,,1756   | 7 RIOTA                                 |              | 144  |
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| <b></b>  | 20) Sample Datafile    | 032318020   |   |              |  |
|  | Method                 | GEBIOTA2017   | .3*                                     |              |  |
|  | 21) Sample             | 21 40151619004,,1756  | 7,BIOTA                                 |              |  |
|  | Datafile               | 032318021   |   |              |  |
|  | Method<br>22) Sample   | GEBIOTA2017<br>22 40151800001,,1756   | 7.BIOTA NS * 2                          |              |  |
|  | Datafile               | 032318022   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |              |  |
|  | Method                 | GEBIOTA2017   |   | •            |  |
|  | 23) Sample             | 23 40151800002,,1756  | 7,BIOTA                                 | •            |  |
|  | Datafile<br>Method     | 032318023<br>GEBIOTA2017  | _                                       |              |  |
|  | 24) Sample             | 24 40151800003 x2,,1  | 7567,ВІОТА <b>РЗ×З</b>                  |              |  |
| A Annual  | Datafile               | 032318024   |   |              |  |
|  | Method                 | GEBIOTA2017   | 2 DIOMS                                 |              |  |
|  | 25) Sample             | 25 40151800004,,1756<br>032318025   | 7, BIOTA                                |              |  |
|  | Datafile<br>Method     | GEBIOTA2017   |   |              |  |
|  | 26) Sample             | 26 40151804001 x3,,1  | 7567, BIOTA                             |              |  |
|  | Datafile               | 032318026   |   |              |  |
|  | Method                 | GEBIOTA2017<br>27 40151804002,,1756   | 7 BIOTA                                 |              |  |
|  | 27) Sample<br>Datafile | 032318027   | .,                                      |              |  |
|  | Method                 | GERIOTA2017   | _ 4                                     |              |  |
|  | 28) Sample             | 28 1254-CCV, 185554:1   | ,17498,AR125 OL                         |              | MAAAAAAAA  |
|  | Datafile               | 032318028   |   |              |  |
| PARAMANANA PARAMANANA  | Method                 | GEBIOTA2017<br>29 1254-CCV,185554:1   | .17498, AR125 OL                        |              | Total and the second se |
|  | 29) Sample Datafile    | 032318029   | 4                                       |              |  |
| Employees (A) (A) (A)  | Method                 | GEBIOTA2017   |   |              | Entered to the second s |
|  | 30) Sample             | 30 40151804003 x2,,1  | 7567, BIOTA                             |              |  |
|  | Datafile               | 032318030<br>GEBIOTA2017  |   |              |  |
|  | Method<br>31) Sample   | 31 40151804009 x3,,1  | 7567, BIOTA                             |              |  |
|  | Datafile               | 032318031   |   |              |  |
|  | Method                 | GEBIOTA2017   | SECT DIOTA                              |              |  |
|  | 32) Sample             | 32 40151804010 x5,,1<br>032318032   | 1261 EBIOIN                             |              |  |
|  | Datafile<br>Method     | GERIOTA2017   |   |              |  |
|  | 33) Sample             | 33 1660-CCV, 185559; 1  | ,17498,AR166 👊                          |              |  |
| 44   | Datafile               | 032318033   |   |              |  |
|  | Method                 | GEBIOTA2017<br>34 1660-CCV,185559:1   | 17498 AR166 AL                          |              |  |
|  | 34) Sample<br>Datafile | 032318034   | ,1,430,711(100 04                       |              |  |
|  | Method                 | GEBIOTA2017   |   |              |  |
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|          | ,  | Datafile             |           |   | , d                      |   |   |  |   |  |   |
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|          | 14)  | Method<br>Sample     |           | SCREEN2014<br>1662166DUP                | · ·                      |   |   |  |   |  |   |
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|          |  | Datafile<br>Method   |           | SCREEN2014                              |                          |   |   |  |   |  |   |
|          | 19)  | RearSamp             | 19        | 40151800-00                             | 3 <b>x</b> 2             |   |   | W/W/   |   | 1  | $\Box$                                  |
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# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

SW1-170613-01-YP-05

| Lab Name: Pace Analytical - Green | Bay SDG No.: 40151619 | Contract: HUDSON RIVER REMEDIAL |
|-----------------------------------|-----------------------|---------------------------------|
| Lab Sample ID: 40151619001        |                       | Percent Moisture:               |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 0.73          |   | %     | 1  | 03/23/2018 06:20   |



# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

SW1-170613-01-YP-04

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40151619 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40151619002            |                   | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
| -       | Lipid   | 0.70          |   | %     | 1  | 03/23/2018 06:20   |



# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

SW1-170613-01-YP-03

Lab Name: Pace Analytical - Green Bay SDG No. : 40151619 Contract: HUDSON RIVER REMEDIAL
Lab Sample ID: 40151619003 Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 1.3           |   | %     | 1  | 03/23/2018 06:20   |



# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

SW1-170613-01-YP-02

| Lab Name: Pace A | Analytical - Green Bay | SDG No.: 40151619 | Contract: | HUDSON RIVER REMEDIAL |
|------------------|------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 4 | 0151619004             |                   | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 0.91          |   | %     | 1  | 03/23/2018 06:20   |



# FORM III INORGANIC-1 BLANKS

| Lab Name: Pace Analytical - Gre    | een BayS                        | DG | No. : <u>40151619</u> | Contract : HUDS    | ON RIVE | R REMEDIA  | AL ACTION  |    |
|------------------------------------|---------------------------------|----|-----------------------|--------------------|---------|--|------------|----|
| Method Blank Matrix: <u>Tissue</u> |                                 |    | Instrument            | ID: 40BALL         |         | _  |            |    |
| Method Blank Concentration Unit    | ts: <u>%</u>                    |    |                       |                    |         |  |            |    |
| Analyte                            | Initial<br>Calibration<br>Blank |    | Cont                  | inuing Calibration | Blank   | mahali (1904 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 - 1905 | Method Bla | nk |
|                                    |                                 | С  | С                     | (                  |         | С  | 1662744    | С  |
| Lipid                              |                                 |    |                       |                    |         |  | <0.030     | U  |

## FORM VI INORGANIC-1 DUPLICATES

SAMPLE NO.

1662747DUP

| Lab Name:  | Pace Analytical - Green Bay | _SDG No.: 40151619     | Contract: | HUDSON RIVER REMEDIAL |
|------------|-----------------------------|------------------------|-----------|-----------------------|
| Matrix:    | Tissue                      | Concentration Units: % |           |                       |
| Percent Mo | sisture:                    | Basis: Wet             |           |                       |
|            |                             |                        |           |                       |
|            |                             |                        |           |                       |

| nit Sample | Duplicate | RPD  |
|------------|-----------|------|
| 0.70       | 0.81      | 14   |
|            | 111       | III. |

# Pace Analytical\* Prep Log Report

**Batch Information: OEXT 284080 LIPIDS** 

### Template Version: F-GB-O-145-Rev.01 (22Mar2018) LIPID

| _   | Analysis Method Pace Lipid     | Analyzed By AMC                   | Instrument 1 40BALL  | Batch Notes |
|-----|--------------------------------|-----------------------------------|--|-------------|
| 4   | Analysis alouned 1. The series | 1.1107.000                        |  |             |
| 2   | Reviewed By BLM                | Reviewed By Date 05/02/2018 14:43 |  |             |
| CB. | Reviewed by DEW                | Reviewed by Date 03/02/2010 14.43 |  |             |
| 7.  | Comple Information:            |                                   |  |             |
| 6   | Sample Information:            |                                   |  |             |
|     | •                              |                                   |  |             |
| 9   |                                |                                   | and the second s |             |

| Rule  | ple Type | Sample ID   | ij     | 1% Posted | Date/Time               |   | Sample Weight<br>g) | Sample Volume<br>(mL) | Aliquot (mL) | Jish Weight (g) | Weight 1 (g) | Wt Use 1 | Sample Notes |
|-------|----------|-------------|--------|-----------|-------------------------|---|---------------------|-----------------------|--------------|-----------------|--------------|----------|--------------|
| 00.6  | Sample   | de          | Select | pid       | Run                     | a | Sam<br>(g)          | sam<br>mL)            | Aliqu        | Jish            | ) Aug        | Aug      | Sam          |
| LIPID | BLANK    | 1662744     | Y      | 0.01500   | 03/23/2018<br>06:20:11  |   | 10                  | 5                     | 1            | 0.9258          | 0.9261       | М        |              |
| LIPID | BLANK    | 1662745     | Y      | 0.04500   | 03/23/2018<br>06:20:11  |   | 10                  | 5                     | 1            | 0.9256          | 0.9265       | М        |              |
| LIPID | PS       | 40151552011 | Y      | 1.255     | 03/23/2018              |   | 9.9626              | 5                     | 1            | 0.9209          | 0.9459       | М        |              |
| LIPID | PS       | 40151597001 | Y      | 0.5350    | 03/23/2018 06:20:11     |   | 9.9992              | 5                     | 1            | 0.9267          | 0.9374       | М        |              |
| LIPID | PS       | 40151605001 | Y      | 1.669     | 03/23/2018 06:20:11     |   | 10.0092             | 5                     | 1            | 0.9233          | 0.9567       | М        |              |
| LIPID | PS       | 40151605002 | Y      | 0.8256    | 03/23/2018 06:20:11     |   | 9.9923              | 5                     | 1            | 0.9281          | 0.9446       | М        |              |
| LIPID | PS       | 40151614001 | Y      | 0.6138    | 03/23/2018 06:20:11     |   | 10.0203             | 5                     | 1            | 0.9272          | 0.9395       | М        |              |
| LIPID | PS       | 40151616001 | Y      | 0.4351    | 03/23/2018              |   | 9.9967              | 5                     | 1            | 0.9266          | 0.9353       | М        |              |
| LIPID | PS       | 40151619001 | Y      | 0.7315    | 03/23/2018<br>.06:20:11 |   | 9.9791              | 5                     | 1            | 0.9237          | 0.9383       | М        |              |
| LIPID | RQS      | 40151619002 | Y      | 0.6984 、  | 63/23/2018<br>06:20:11  |   | 10.0233             | 5                     | 1            | 0.9254          | 0.9394       | М        |              |
| LIPID | DUP      | 1662747     | Y      | 0.8068    | 93/23/2018<br>06:20:11  |   | 9.9773              | 5                     | 1            | 0.9286          | 0.9447       | М        |              |
| LIPID | PS       | 40151619003 | Y      | 1.308     | 03/23/2018<br>06:20:11  |   | 10.0185             | 5                     | 1            | 0.9251          | 0.9513       | М        |              |
| LIPID | PS       | 40151619004 | Y      | 0.9110    | 03/23/2018<br>06:20:11  |   | 9.9887              | 5                     | 1            | 0.9302          | 0.9484       | М        |              |
| LIPID | PS       | 40151800001 | Y      | 0.4543    | 03/23/2018<br>06:20:11  |   | 10.0159             | 5                     | 1            | 0.9307          | 0.9398       | М        |              |
| LIPID | PS       | 40151800002 | Y      | 0.6069    | 03/23/2018<br>06:20:11  |   | 9.968               | 5                     | 1            | 0.9303          | 0.9424       | М        |              |
| LIPID | PS       | 40151800003 | Y      | 1.099     | 03/23/2018<br>06:20:11  |   | 9.9637              | 5                     | 1            | 0.9323          | 0.9542       | М        |              |
| LIPID | PS       | 40151800004 | Y      | 0.8284    | 03/23/2018<br>06:20:11  |   | 10.0193             | 5                     | 1            | 0.9266          | 0.9432       | М        |              |
| LIPID | PS       | 40151804001 | Y      | 1.434     | 03/23/2018<br>06:20:11  |   | 9.9711              | 5                     | 1            | 0.9289          | 0.9575       | М        |              |
| LIPID | PS       | 40151804002 | Y      | 0.3909    | 03/23/2018<br>06:20:11  |   | 9.9758              | 5                     | 1            | 0.9282          | 0.936        | М        |              |

**Biota Homogenization Log (NYDOH Method)** 

Client Name: Project #:

Sample Type: Fish

Date/Time Removed to Thaw: Date/Time Prepped:

Prepped by:

CWN+ JL+RM

Location Thawed: 40FRG21 (Room Temperature (circle one)

4413 Logbook: Picture of Internal A) Scales Removed Whole Fish/Welght Organs Gender Picture of Number of Picture of Weight of homogenized Processing Type B) Skin Removed Body/Fillet Taken? **Total Fish** Intact (Optional) Fillet Left/Both Fillet/Weight Container Jars/Weight Containers Sample ID (Note A or B Below) (WB/F) Weight (g) M/F/U<sup>5</sup> Fillet<sup>2</sup>? Code<sup>3</sup> (C/G/R/RM)4 (Y/N) (Y/N) Weight (g) Taken? (Y/N) Used Taken? (Y/N) Sample (g) Sample Comments 9AG 58. 250.4 60.1 Left Both 69.5 67.3 QAG 331.3 M Left Both Α F 51.1 PAG 49.5 212.0 M Left Both F 146.3 V M GAG 61.3 Left / Both 60.3 Left / Both Left / Both Left / Both Left / Both Left / Both Left / Both Left / Both Left#Both CWN 03-13-18 Left / Both Left / Both Left / Both Left / Both Left / Both Left / Both Left / Both Left / Both

(1) M = Male, F = Female, U = Undetermined

(2) If left fillet weight is under 40g, the right fillet in included in the sample weight.

(3) Note Container Type / Lot # using Codes Below:

| Container Code | Container Size    | Lot#         |  |  |  |  |  |  |  |
|----------------|-------------------|--------------|--|--|--|--|--|--|--|
| 2CG            | 2 oz Clear Glass  |              |  |  |  |  |  |  |  |
| 4AG            | 4 oz Amber Glass  |              |  |  |  |  |  |  |  |
| 9AG            | 9 oz Amber Glass  | F-7-212-04AB |  |  |  |  |  |  |  |
| 32AG           | 32 oz Amber Glass |              |  |  |  |  |  |  |  |

(4) Processing Type Code Descriptions:

| 11711000000111911 | pe dead Decompliane.         |  |  |  |  |  |
|-------------------|------------------------------|--|--|--|--|--|
| Code              | Description of Code          |  |  |  |  |  |
| С                 | Chopped                      |  |  |  |  |  |
| G                 | Grind                        |  |  |  |  |  |
| R                 | Robot coupe                  |  |  |  |  |  |
| RM                | Robot coupe multiple batches |  |  |  |  |  |
| F-GB-O-153-REV.   | 01 (21Feb2018)               |  |  |  |  |  |

Pace Analytical Services, LLC - Green Bay, WI



#### **ANALYTICAL RESULTS**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

0950

Sample: SW1-170613-01-YP-05

Lab ID: 40151619001

Collected: 06/13/17 16:21

Received: 06/14/17 15:2T Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL        | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | 8082A Mod F   | reparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4      | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 166        | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 96.8       | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 23.3J      | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 11096-82-5 |      |
| PCB, Total               | 286        | ug/kg       | 50.1          | 11.4       | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 1336-36-3  |      |
| Surrogates               |            |             |               |            |      |                |                |            |      |
| Tetrachloro-m-xylene (S) | 89         | %           | 60-140        |            | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 87         | %           | 60-140        |            | 1    | 03/22/18 07:22 | 03/23/18 16:20 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ng         |      |                |                |            |      |
| Gender                   | Male       |             |               |            | 1    |                | 03/13/18 13:06 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid       |            |      |                |                |            |      |
| Lipid                    | 0.73       | %           | 0.030         | 0.030      | 1    |                | 03/23/18 06:20 |            |      |

#### **REPORT OF LABORATORY ANALYSIS**

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9 of 418 40151619





### **ANALYTICAL RESULTS**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

095<sup>0</sup>

Sample: SW1-170613-01-YP-04

Lab ID: 40151619002

Collected: 06/13/17 16:20 Received: 06/14/17 45:21 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL                    | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|------------------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod            | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 11104-28-2 |      |
| PCB-1232 (Arodor 1232)   | <11.4      | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 284        | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 183        | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 41.4J      | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 11096-82-5 |      |
| PCB, Total               | 508        | ug/kg       | 49.9                   | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 1336-36-3  |      |
| Surrogates               |            |             |                        |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | 89         | %           | 60-140                 |             | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 92         | %           | 60-140                 |             | 1     | 03/22/18 07:22 | 03/23/18 17:07 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender T <b>y</b> pi | ng          |       |                |                |            |      |
| Gender                   | Male       |             |                        |             | 1     |                | 03/13/18 13:06 |            |      |
| Lipid                    | Analytical | Method: Pad | e Lipid                |             |       |                |                |            |      |
| Lipid                    | 0.70       | %           | 0.030                  | 0.030       | 1     |                | 03/23/18 06:20 |            |      |

### REPORT OF LABORATORY ANALYSIS

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10 of 418 40151619



#### **ANALYTICAL RESULTS**

Project: HUDSON RIVER REMEDIAL ACTION

Pace Project No.: 40151619

Sample: SW1-170613-01-YP-03 Lab ID: 40151619003 Collected: 06/13/17 16:18 Received: 06/14/17 15:21 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results             | Units       | PQL           | MDL         | DF   | Prepared                | Analyzed       | CAS No.    | Qual |
|--------------------------|---------------------|-------------|---------------|-------------|------|-------------------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical          | Method: EPA | A 8082A Mod   | Preparation | Meth | od: EPA 3541            |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4               | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4               | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4               | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4               | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 325                 | ug/kg       | 49.9          | 11.4        | 1    | 03/22 <b>/</b> 18 07:22 | 03/23/18 17:39 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 215                 | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 56.2                | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 11096-82-5 |      |
| PCB, Total               | 596                 | ug/kg       | 49.9          | 11.4        | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 1336-36-3  |      |
| Surrogates               |                     |             |               |             |      |                         |                |            |      |
| Tetrachloro-m-xylene (S) | 86                  | %           | 60-140        |             | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 88                  | %           | 60-140        |             | 1    | 03/22/18 07:22          | 03/23/18 17:39 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical          | Method: Pac | e Gender Typi | ing         |      |                         |                |            |      |
| Gender                   | Male                |             |               |             | 1    |                         | 03/13/18 13:06 |            |      |
| Lipid                    | Anal <b>y</b> tical | Method: Pac | e Lipid       |             |      |                         |                |            |      |
| Lipid                    | 1.3                 | %           | 0.030         | 0.030       | 1    |                         | 03/23/18 06:20 |            |      |

#### REPORT OF LABORATORY ANALYSIS

Page 12 of 19



#### **ANALYTICAL RESULTS**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

Lab ID: 40151619004

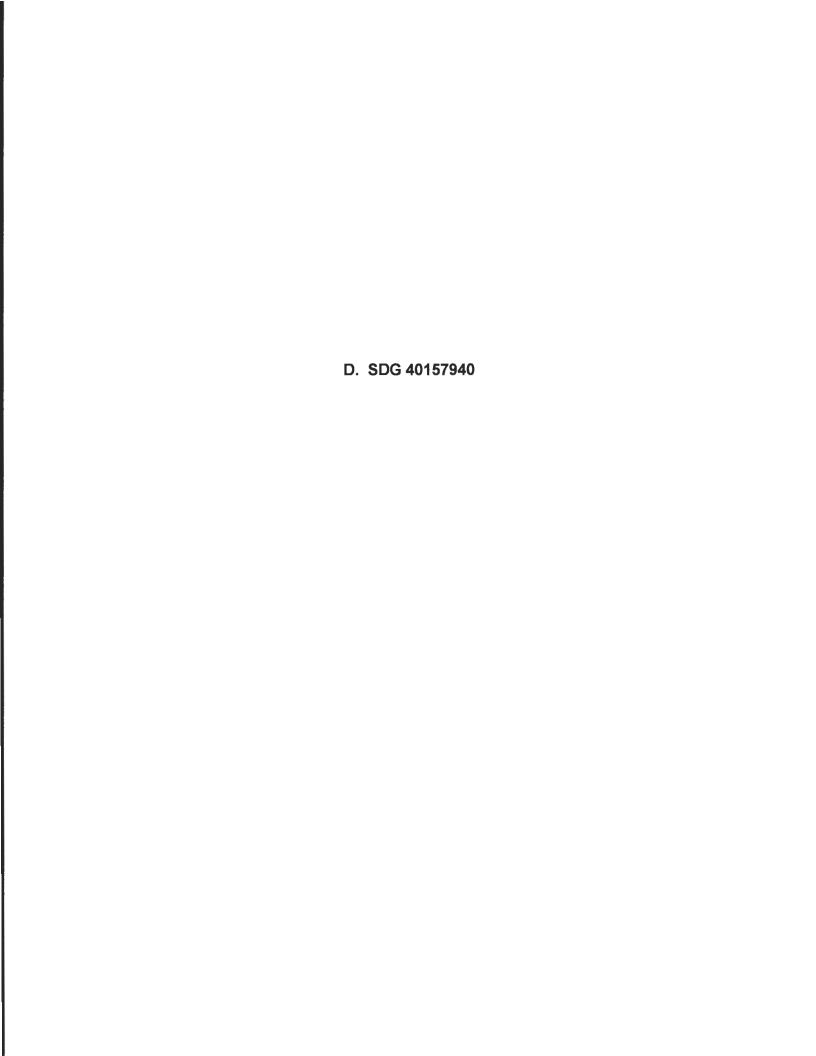
0950

Collected: 06/13/17 16:16 Received: 06/14/17 15:21 Matrix: Tissue

Results reported on a "wet-weight" basis

Sample: SW1-170613-01-YP-02

| Parameters               | Results    | Units       | PQL           | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | N 8082A Mod I | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <11.4      | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <11.4      | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <11.4      | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <11.4      | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 194        | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 12672-29-6 |      |
| PCB-1254 (Arodor 1254)   | 103        | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 11097-69-1 |      |
| PCB-1260 (Arodor 1260)   | 34.2J      | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 11096-82-5 |      |
| PCB, Total               | 332        | ug/kg       | 50.1          | 11.4        | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 1336-36-3  |      |
| Surrogates               |            |             |               |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | 95         | %           | 60-140        |             | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 97         | %           | 60-140        |             | 1     | 03/22/18 07:22 | 03/23/18 17:55 | 2051-24-3  |      |
| Fish Gender Typing       | Analytical | Method: Pac | e Gender Typi | ng          |       |                |                |            |      |
| Gender                   | Male       |             |               |             | 1     |                | 03/13/18 13:06 |            |      |
| Lipid                    | Analytical | Method: Pac | e Lipid       |             |       |                |                |            |      |
| Lipid                    | 0.91       | %           | 0.030         | 0.030       | 1     |                | 03/23/18 06:20 |            |      |





### ORGANIC ANALYSIS SUPPORT DOCUMENTATION

| •   |          | - ,,   |          |         |                              |                                | · · · · · ·                             |          |   |            |                             |         |          |          |          |
|---|----------|--|----------|---------|------------------------------|--------------------------------|---|----------|---|------------|-----------------------------|---------|----------|----------|----------|
| ESI project name:   | GEHR     | RAMP   |          |         |                              |                                | Re                                      | viewed   | by:                                     | JA 5/31/18 |                             |         |          |          |          |
| Sample Collection Dates:                                  | 8/28/17  |  | •        |         |                              |                                |   | proved   |   |            |                             |         |          | —        |          |
| Job Number:   | 201156   |  | 20       |         |                              |                                |   | etion Da |   | Mm (0(18)  |                             |         |          |          |          |
|   |          |  |          |         |                              | `                              | Compie                                  | ים ווטוו | ale.<br>-                               | U          | 2//8                        |         |          |          |          |
| Project Manager:  |          | Meg Michell                                      |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
| Laboratory:   | Pace G   | В  |          |         | Applicable Sample No's ( X ) |                                |   |          | X )                                     | Refer      |                             |         |          |          |          |
|   |          |  |          |         |                              |                                |   |          |   | Quality    | / Assu                      | rance F | Review   | 1        |          |
|   |          |  |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
|   |          |  |          |         | Samp                         | le No.                         |   |          |   | Lab Co     | ontrol I                    | No.     |          |          |          |
| Deliverable: CLP (Full)                                   | ( )      |  |          |         | Refer                        |                                | ıle 1                                   |          |   |            |                             |         |          |          |          |
| ()  |          |  |          | -       |                              | 10 100                         | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |          |   |            |                             |         |          |          |          |
| Level IV (Full)   | ( )      |  |          | _       |                              |                                |   |          |   |            | an                          |         |          |          |          |
| Limited   | ( )      |  |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
| Other:  | Full Per | Phase  | e 2      | _       |                              |                                |   |          |   |            |                             |         |          |          |          |
|   | _RAMP (  | QAPP   |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
|   |          |  |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
|   | Cuit     | orio E   | xamine   | d in D  | \otoil                       |                                | Droblo                                  | ms Ide   | ntific                                  | .4         | l e                         | pport   | Doorin   | nontoi   | tion     |
|   | Crit     | eria E   | xamıne   | ea in L | etan                         | '                              | Proble                                  | ins ide  | enune                                   | u          | Su                          |         | achme    |          | ,1011    |
|   |          |  |          |         |                              |                                |   |          |   |            |                             | 710     | acinin   | ,1163    |          |
|   | Che      | Check (√) if Yes or Foo<br>Letter for Comments E |          |         |                              | ootnote Check (√) if Yes or Fo |   |          |   |            | ootnote Check (√) if Yes or |         |          |          |          |
| The following table indicates criteria that               |          |  |          |         |                              |                                |   | Comme    |   |            | Letter for Comments Below   |         |          |          |          |
| were examined, the identified problems,                   | N        | 7 .335.20  | T        |         |                              |                                |   |          |   |            |                             |         |          |          | Τ        |
| and support documentation attachments                     |          |  |          |         |                              |                                |   |          |   |            | -                           |         |          |          |          |
|   | 327      |  |          |         |                              | 327                            |   |          |   |            | 327                         |         |          |          |          |
|   | 8082A    |  |          |         |                              | 8082A                          |   |          |   |            | 8082A                       |         |          |          |          |
|   |          |  |          |         |                              |                                |   |          |   |            |                             | 74      |          |          |          |
| Holding Times   | X        |  |          |         |                              |                                |   |          |   |            | Х                           |         |          |          |          |
| Blank Analysis: Target Cmpds                              | X        |  |          |         |                              |                                |   |          | *************************************** |            | X                           |         | <u> </u> | <u> </u> | -        |
| Sys Montr Cmps/Surrogates                                 | X        |  |          |         |                              | Х*                             |   |          |   |            | Х                           |         |          |          |          |
| Matrix Spike/Matrix Spike Duplicate                       | X        |  |          |         |                              |                                |   |          |   |            | Х                           |         |          |          |          |
| Blank Spike   | X        |  |          |         |                              |                                |   |          |   |            | Х                           |         |          |          |          |
| Duplicate Analysis ( ) Field ( X ) Lab                    | Χ        |  |          |         |                              |                                |   |          |   |            | Х                           |         |          |          |          |
| Detection Limit/Sensitivity                               |          |  |          |         |                              |                                |   |          |   |            |                             |         |          | <u></u>  | ļ        |
| Qualitative Identification: Target Cmpds                  | X        |  |          |         |                              |                                |   |          |   |            | Х                           |         |          |          |          |
| Qualitative Identification: TICs                          |          |  |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
| DFTPP & BFB Mass Tuning                                   |          |  |          |         |                              |                                |   |          |   |            |                             |         |          | <u> </u> | <u> </u> |
| GC Instrument Performance                                 |          |  |          |         |                              |                                |   |          |   |            |                             |         |          | <u> </u> | <u> </u> |
| Initial Calibrations Continuing Calibrations              | X        |  |          |         |                              |                                |   |          | ·····                                   |            | X                           |         |          | ļ        |          |
| Quantitation of Results                                   | X        |  |          |         |                              | Х                              |   |          |   |            | x                           |         |          |          | -        |
| DDT/Endrin Breakdown                                      |          |  |          |         |                              |                                |   |          |   |            |                             |         |          | <u>i</u> | <u> </u> |
| Surrogate Retention Time Shifts                           | X        |  |          |         |                              |                                |   |          |   |            | X                           |         |          |          |          |
| Internal Standards Performance                            |          |  |          |         |                              |                                |   |          |   |            |                             |         | ļ        |          |          |
| Internal Standards Performance Resolution Check Standards |          |  | <u> </u> |         |                              |                                |   |          |   |            |                             |         |          |          | <u> </u> |
| Analytical Sequence                                       | X        | <u></u>  | <u> </u> |         |                              |                                |   |          |   |            | X                           |         | <u> </u> |          | 1        |
| Florisil Cartridge & GPC Calibration                      |          |  |          |         |                              |                                |   |          |   |            |                             |         |          | φ        | ·        |
| GC Column Agreement                                       |          |  |          |         |                              |                                |   |          |   | -          | •                           |         | ·····    |          |          |
| GC Column Agreement Condition Upon Receipt                | X        |  |          |         |                              |                                |   |          |   |            | Х                           |         |          |          |          |
| Percent Solids  |          |  |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |
| Others:   |          |  |          |         |                              |                                |   |          |   |            |                             |         |          |          |          |

| Comments: | Results < RL should be considered estimated. Total PCB results calculated with estimated Aroclor results should be |  |  |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|--|--|--|
|           | considered estimated.  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |
|           | * multiple samples had surrogates diluted out ( >5 fold dilution)  |  |  |  |  |  |  |  |  |
|           |  |  |  |  |  |  |  |  |  |

### PCB - FORM II SVOA-1 TISSUE SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No.: 40157940 Contract: HUDSON RIVER REMEDIAL

Instrument ID: 40GCSJ

| LAB SAMPLE ID | SAMPLE NAME                 | DCBP        | TCMX          |
|---------------|-----------------------------|-------------|---------------|
| 1677643       | 1677643BLANK                | 96          | 76            |
| 1677644       | 1677644LCS                  | 99          | 82            |
| 40157940001   | TD5-170828-01-PKSD-02       | 106 🗸       | 99 D I        |
| 40157940002   | TD3-170828-01-PKSD-05       | 0*          | 0* 178/93     |
| 40157940003   | TD3-170828-01-PKSD-04       | <b>)</b> 0* | 0* 121 / 87   |
| 40157940004   | TD3-170828-01-PKSD-03       | 0*          | 0* 147/117    |
| 40157940005   | TD3-170828-01-PKSD-02       | \ o*        | 0* الم 11 الم |
| 40157940006   | TD2-170828-01-PKSD-02       | 100 🗸       | 90            |
| 40157940007   | TD2-170828-01-PKSD-01 /     | 101         | 97            |
| 40157940008   | TD1-170828-01-PKSD-05/      | ζ 0*        | 0* 152 / 121  |
| 40157940009   | TD1-170828-01-PKSD-04       | <u>/</u> 0* | 0* 156/ 124   |
| 40157940010   | TD1-170828-01-PKSD-03 /     | 118         | 99            |
| 40157940011   | TD1-170828-01-PKSD-\$\psi_2 | 110         | 93            |
| 40157940012   | ND2-170828-01-PKSD-04       | 0*          | 0* 118/ 16    |
| 40157940013   | ND2-170828-01-PKSD-03       | 0*          | 0* 153   128  |
| 40157940014   | ND2-170828-01-PKSD-02       | € 0*        | 0* 144/115    |
| 40157940016   | ND1-170828-01-PKSD-06       | ∕ / 0*      | 0* 12/92      |
| 40157940017   | ND1-170828-01-PKSD-05       | 0*          | 0* 126/101    |
| 40157940018   | ND1-170828-01-PKSD-03       | ر 111       | 98            |
| 40157940019   | ND1-170828-01-PKSD-02       | _O*         | 0* 110/67     |
| 40157940020   | ND1-170828-01-PKSD-01       | 102         | 91            |
|               | 1 1 .                       | ž.          |               |

(DCBP) = Decachlorobiphenyl (S) (TCMX) = Tetrachloro-m-xylene (S)

\* Values outside of QC Limits

QC LIMITS (60-140)(60-140)

DFS 710. No Qual

### PCB - FORM II SVOA-1 TISSUE SEMI-VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - Green Bay SDG No.: 40157940 Contract: HUDSON RIVER REMEDIAL

Instrument ID: 40GCSK

| LAB SAMPLE ID | SAMPLE NAME           | DCBP | TCMX |          |
|---------------|-----------------------|------|------|----------|
| 1681428       | 1681428BLANK          | 80 V | 70   |          |
| 1681429       | 1681429LCS            | 86   | 77   |          |
| 1681430       | 1681430MS             | 0*   | 0*   | I D      |
| 1681911       | 1681911DUP            | 0*   | 0*   | 92 /11   |
| 40157940015   | ND2-170828-01-GOSH-02 | ( 0* | 0*   | 102 /110 |

(DCBP) = Decachlorobiphenyl (S)

(TCMX) = Tetrachloro-m-xylene (S)

\* Values outside of QC Limits

QC LIMITS (60-140)

(60-140)

DF710. No Qual





Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

|                          |       | 40158013010 | Dup    |     | Max |            |
|--------------------------|-------|-------------|--------|-----|-----|------------|
| Parameter                | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)  | ug/kg | <207        | <128   |     | 40  |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | 388J        | 313J   |     | 40  |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <207        | <128   |     | 40  |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <207        | <128   |     | 40  |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | 2900        | 2290   | 23  | 40  |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | 1260        | 1000   | 23  | 40  |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | 225J        | 179J   |     | 40  |            |
| Decachlorobiphenyl (S)   | %     | 117         | 106    | 56  |     |            |
| Tetrachloro-m-xylene (S) | %     | 97          | 89     | 54  |     |            |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Date: 05/10/2018 03:56 PM



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

QC Batch:

286769

Analysis Method:

EPA 8082A Mod

QC Batch Method:

EPA 3541

Analysis Description:

8082 GCS PCB

Associated Lab Samples:

40157940001, 40157940002, 40157940003, 40157940004, 40157940005, 40157940006, 40157940007, 40157940008, 40157940009, 40157940010, 40157940011, 40157940012, 40157940013, 40157940014,

40157940016, 40157940017, 40157940018, 40157940019, 40157940020

METHOD BLANK: 1677643

Matrix: Tissue

Associated Lab Samples:

40157940008, 40157940009, 40157940010, 40157940011, 40157940012, 40157940013, 40157940014,

40157940016, 40157940017, 40157940018, 40157940019, 40157940020

|                          |       | Blank  | Reporting |      |                |            |
|--------------------------|-------|--------|-----------|------|----------------|------------|
| Parameter                | Units | Result | Limit     | MDL  | Analyzed       | Qualifiers |
| PCB-1016 (Aroclor 1016)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | <11.4  | 50.0      | 11.4 | 04/25/18 14:57 |            |
| Decachlorobiphenyl (S)   | %     | 96     | 60-140    |      | 04/25/18 14:57 |            |
| Tetrachloro-m-xylene (S) | %     | 76     | 60-140    |      | 04/25/18 14:57 |            |

| Units<br>ug/kg<br>ug/kg<br>ug/kg | Conc                | Result <11.4 <11.4 <11.4 | % Rec                      | Limits                             | Qualifiers                                |
|----------------------------------|---------------------|--------------------------|----------------------------|------------------------------------|---|
| ug/kg                            |                     | <11.4                    |                            |                                    |   |
| 5 0                              |                     |                          |                            |                                    |   |
| ug/kg                            |                     | -11 1                    |                            |                                    |   |
| _                                |                     | \11. <del>4</del>        |                            |                                    |   |
| ug/kg                            | 250                 | 241                      | 96                         | 70-130                             |   |
| ug/kg                            |                     | <11.4                    |                            |                                    |   |
| ug/kg                            |                     | <11.4                    |                            |                                    |   |
| ug/kg                            |                     | <11.4                    |                            |                                    |   |
| %                                |                     |                          | 99                         | 60-140                             |   |
| %                                |                     |                          | 82                         | 60-140                             |   |
|                                  | ug/kg<br>ug/kg<br>% | ug/kg<br>ug/kg<br>%      | ug/kg <11.4<br>ug/kg <11.4 | ug/kg <11.4<br>ug/kg <11.4<br>% 99 | ug/kg <11.4<br>ug/kg <11.4<br>% 99 60-140 |

| MATRIX SPIKE SAMPLE:     | 1677645                       | 40158013010                  | Spike          | MS                    | MS                     | % Rec              |            |
|--------------------------|-------------------------------|------------------------------|----------------|-----------------------|------------------------|--------------------|------------|
| Parameter                | Units                         | Result                       | Conc.          | Result                | % Rec                  | Limits             | Qualifiers |
| PCB-1016 (Aroclor 1016)  | ug/kg                         | <207                         |                | <140                  |                        |                    |            |
| PCB-1221 (Aroclor 1221)  | ug/kg                         | 388J                         |                | 529J                  |                        |                    | 1          |
| PCB-1232 (Aroclor 1232)  | ug/kg                         | <207                         |                | <140                  | $\sim$                 |                    | _ /        |
| PCB-1242 (Aroclor 1242)  | ug/kg                         | <207                         | 306            | 1360                  | (445)                  | 70-130 M           | 6 Sec/_    |
| PCB-1248 (Aroclor 1248)  | ug/kg                         | 2900                         |                | 3010                  | $\cup$                 |                    | 7. N       |
| PCB-1254 (Aroclor 1254)  | ug/kg                         | 1260                         |                | 1250                  |                        |                    | Form       |
| PCB-1260 (Aroclor 1260)  | ug/kg                         | 225J                         |                | 220J                  |                        |                    | -11-1      |
| Decachlorobiphenyl (S)   | %                             |                              |                |                       | 119                    | 60-140             | to         |
| Tetrachloro-m-xylene (S) | %                             |                              |                |                       | 100                    | 60-140             | -/         |
|                          |                               |                              |                |                       |                        |                    |            |
| Results presented        | on this page are in the units | indicated by the "Units" col | umn except whe | ere an alternate unit | is presented to the ri | ght of the result. | 50         |
|                          |                               |                              |                |                       | 4                      |                    | Non        |
|                          |                               | DODT OF LABOR                |                |                       | •                      |                    |            |
|                          |                               |                              | 2 A T ( 10 V A | KINI VCIC             |                        |                    |            |

#### REPORT OF LABORATORY ANALYSIS

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Page 30 of 41

40157940



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

QC Batch:

287324

Analysis Method:

EPA 8082A Mod

QC Batch Method:

EPA 3541

Analysis Description:

8082 GCS PCB

Associated Lab Samples:

40157940015

METHOD BLANK: 1681428

Matrix: Tissue

Associated Lab Samples:

Date: 05/10/2018 03:56 PM

40157940015

| Parameter                | Units | Blank<br>Result | Reporting<br>Limit | MDL  | Analyzed       | Qualifiers |
|--------------------------|-------|-----------------|--------------------|------|----------------|------------|
| PCB-1016 (Aroclor 1016)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | <11.4           | 50.0               | 11.4 | 05/07/18 14:38 |            |
| Decachlorobiphenyl (S)   | %     | 80              | 60-140             |      | 05/07/18 14:38 |            |
| Tetrachloro-m-xylene (S) | %     | 70              | 60-140             |      | 05/07/18 14:38 |            |

|                       |       | Spike | LCS    | LCS   | % Rec  |            |
|-----------------------|-------|-------|--------|-------|--------|------------|
| Parameter             | Units | Conc. | Result | % Rec | Limits | Qualifiers |
| 3-1016 (Aroclor 1016) | ug/kg |       | <11.4  |       |        |            |
| 3-1221 (Aroclor 1221) | ug/kg |       | <11.4  |       |        |            |
| 3-1232 (Aroclor 1232) | ug/kg |       | <11.4  |       |        |            |
| 3-1242 (Aroclor 1242) | ug/kg | 250   | 236    | 94    | 70-130 |            |
| -1248 (Aroclor 1248)  | ug/kg |       | <11.4  |       |        |            |
| -1254 (Aroclor 1254)  | ug/kg |       | <11.4  |       |        |            |
| 3-1260 (Aroclor 1260) | ug/kg |       | <11.4  |       |        |            |
| achlorobiphenyl (S)   | %     |       |        | 86    | 60-140 |            |
| achloro-m-xylene (S)  | %     |       |        | 77    | 60-140 |            |

| MATRIX SPIKE SAMPLE:      | 1681430 |             |       | ·      |                       |           |            |
|---------------------------|---------|-------------|-------|--------|-----------------------|-----------|------------|
|                           |         | 40157940015 | Spike | MS     | MS                    | % Rec     |            |
| Parameter                 | Units   | Result      | Conc. | Result | % Rec                 | Limits    | Qualifiers |
| PCB-1016 (Aroclor 1016)   | ug/kg   | <228        |       | <228   |                       |           |            |
| PCB-1221 (Aroclor 1221)   | ug/kg   | 996J        |       | 1220   |                       |           | can to     |
| PCB-1232 (Aroclor 1232)   | ug/kg   | <228        |       | <228   |                       |           | See .      |
| PCB-1242 (Aroclor 1242)   | ug/kg   | <228        | 250   | 1220   | <b>/</b> 487 <b>/</b> | 70-130 M  | See Fo     |
| PCB-1248 (Aroclor 1248)   | ug/kg   | 2930        |       | 2890   |                       |           | / 1        |
| PCB-1254 (Aroclor 1254)   | ug/kg   | 1260        |       | 1200   |                       |           | Te-671     |
| PCB-1260 (Aroclor 1260)   | ug/kg   | 288J        |       | 268J   |                       |           | L6-631     |
| Decachlorobiphenyl (S)    | %       |             |       |        | 0                     | 60-140 S4 | ļ          |
| Tetrachloro-m-xylene (S)  | %       |             |       |        | 0                     | 60-140 S4 | ļ          |
| Totadomoro III Ayrono (O) | 70      |             |       |        | ,                     | 00 110 01 | •          |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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Page 33 of 41



### **QUALITY CONTROL DATA**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

| AMPLE DUPLICATE: 1681432 |       | 40157948011 | Dup    |     | Max |            |
|--------------------------|-------|-------------|--------|-----|-----|------------|
| Parameter                | Units | Result      | Result | RPD | RPD | Qualifiers |
| CB-1016 (Aroclor 1016)   | ug/kg | <114        | <114   |     | 40  |            |
| CB-1221 (Aroclor 1221)   | ug/kg | 614         | 631    | 3   | 40  |            |
| CB-1232 (Aroclor 1232)   | ug/kg | <114        | <114   |     | 40  |            |
| CB-1242 (Aroclor 1242)   | ug/kg | <114        | <114   |     | 40  |            |
| CB-1248 (Aroclor 1248)   | ug/kg | 1830        | 1870   | 2   | 40  |            |
| CB-1254 (Aroclor 1254)   | ug/kg | 785         | 805    | 3   | 40  |            |
| CB-1260 (Aroclor 1260)   | ug/kg | 187J 🔈      | 196J 💂 |     | 40  |            |
| ecachlorobiphenyl (S)    | %     | 103         | 102    | 1   |     |            |
| trachloro-m-xylene (S)   | %     | 97          | 96     | 1   |     |            |

| SAMPLE DUPLICATE: 1681433 |       | 40158017020 | Dup     |     | Max |            |
|---------------------------|-------|-------------|---------|-----|-----|------------|
| Parameter                 | Units | Result      | Result  | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)   | ug/kg | <11.4       | <11.4   |     | 40  |            |
| PCB-1221 (Aroclor 1221)   | ug/kg | <11.4       | <11.4   |     | 40  |            |
| PCB-1232 (Aroclor 1232)   | ug/kg | <11.4       | <11.4   |     | 40  |            |
| PCB-1242 (Aroclor 1242)   | ug/kg | <11.4       | <11.4   |     | 40  |            |
| PCB-1248 (Aroclor 1248)   | ug/kg | 23.5J       | 21.8J · |     | 40  |            |
| PCB-1254 (Aroclor 1254)   | ug/kg | 22.2J       | 20.0J ° |     | 40  |            |
| PCB-1260 (Arodor 1260)    | ug/kg | 25.7J       | 24.0J   |     | 40  |            |
| Decachlorobiphenyl (S)    | %     | 93          | 85      | 9   |     |            |
| Tetrachloro-m-xylene (S)  | %     | 103         | 95      | 8   |     |            |

|                          |       | 40158029004 | Dup    |     | Max |            |
|--------------------------|-------|-------------|--------|-----|-----|------------|
| Parameter                | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)  | ug/kg | <56.8       | <56.9  |     | 40  |            |
| PCB-1221 (Aroclor 1221)  | ug/kg | 277         | 291    | 5   | 40  |            |
| PCB-1232 (Aroclor 1232)  | ug/kg | <56.8       | <56.9  |     | 40  |            |
| PCB-1242 (Aroclor 1242)  | ug/kg | <56.8       | <56.9  |     | 40  |            |
| PCB-1248 (Aroclor 1248)  | ug/kg | 890         | 922    | 4   | 40  |            |
| PCB-1254 (Aroclor 1254)  | ug/kg | 334         | 347    | 4   | 40  |            |
| PCB-1260 (Aroclor 1260)  | ug/kg | 97.0J -     | 102J   | ~   | 40  |            |
| Decachlorobiphenyl (S)   | %     | 99          | 102    | 4   |     |            |
| Tetrachloro-m-xylene (S) | %     | 94          | 99     | 5   |     |            |

| SAMPLE DUPLICATE: 1681911 |       |             |        |     |     |            |
|---------------------------|-------|-------------|--------|-----|-----|------------|
|                           |       | 40157940015 | Dup    |     | Max |            |
| Parameter                 | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1016 (Aroclor 1016)   | ug/kg | <228        | <228   |     | 4   | 0          |
| PCB-1221 (Arodor 1221)    | ug/kg | 996J 💆      | 1040   |     | 41  | 0          |
| PCB-1232 (Aroclor 1232)   | ug/kg | <228        | <228   |     | 4   | 0          |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### **REPORT OF LABORATORY ANALYSIS**

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Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

| SAMPLE DUPLICATE: 1681911 |       |             |        |     |     |            |
|---------------------------|-------|-------------|--------|-----|-----|------------|
|                           |       | 40157940015 | Dup    |     | Max |            |
| Parameter                 | Units | Result      | Result | RPD | RPD | Qualifiers |
| PCB-1242 (Aroclor 1242)   | ug/kg | <228        | <228   |     | 40  |            |
| PCB-1248 (Aroclor 1248)   | ug/kg | 2930        | 2680   | 9   | 40  |            |
| PCB-1254 (Aroclor 1254)   | ug/kg | 1260        | 1150   | 9   | 40  |            |
| PCB-1260 (Aroclor 1260)   | ug/kg | 288J        | ′ 280J | •   | 40  |            |
| Decachlorobiphenyl (S)    | %     | 0           | 0      |     |     | S4         |
| Tetrachloro-m-xylene (S)  | %     | 0           | 0      |     |     | S4         |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Date: 05/10/2018 03:56 PM



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

QC Batch:

286925

Analysis Method:

Pace Lipid

QC Batch Method:

Pace Lipid

Analysis Description:

LIPID

Associated Lab Samples:

40157940001, 40157940002, 40157940003, 40157940004, 40157940005, 40157940006, 40157940007, 40157940008, 40157940009, 40157940010, 40157940011, 40157940012, 40157940013, 40157940014,

40157940016, 40157940017, 40157940018, 40157940019, 40157940020

METHOD BLANK: 1678322

Matrix: Tissue

Associated Lab Samples:

40157940001, 40157940002, 40157940003, 40157940004, 40157940005, 40157940006, 40157940007, 40157940008, 40157940009, 40157940010, 40157940011, 40157940012, 40157940013, 40157940014,

40157940016, 40157940017, 40157940018, 40157940019, 40157940020

Blank Parameter Units Result Lipid % < 0.030 Reporting Limit

MDL Analyzed 04/25/18 08:49 0.030

Qualifiers

MATRIX SPIKE SAMPLE:

1683167

40158013010

Spike

2.3

0.030

MS

53

MS

% Rec

Lipid

Lipid

Units %

%

Result

Conc. 4.0

Result 2.7 % Rec

Limits

Qualifiers

SAMPLE DUPLICATE: 1678325

Parameter

Parameter

Units

40158013010 Result 4.0

Dup Result RPD

Max RPD 40 R1

Qualifiers

hon

sour Parent No Qual

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

40157940



| Project: HUDSON RIVE Pace Project No.: 40157940                             | R REMEDIAL ACT | TON M                            |                    |              |                |                 |             |
|---|----------------|----------------------------------|--------------------|--------------|----------------|-----------------|-------------|
| QC Batch: 287437 QC Batch Method: Pace Lipid Associated Lab Samples: 401579 | 140015         | Analysis Metho<br>Analysis Descr |                    | ce Lipid     |                |                 |             |
| METHOD BLANK: 1681739   |                | Matrix: T                        | issue              |              |                |                 |             |
| Associated Lab Samples: 401579  | 40015          |                                  |                    |              |                |                 |             |
| Parameter   | Units          | Blank<br>Result                  | Reporting<br>Limit | MDL          | Analyzed       | Qualifiers      |             |
| Lipid   | %              | <0.030                           | 0.030              | 0.030        | 04/30/18 14:40 |                 | <del></del> |
| MATRIX SPIKE SAMPLE:  | 1688378        |                                  |                    |              |                |                 |             |
| Parameter   | Units          | 40157940015<br>Result            | Spike<br>Conc.     | MS<br>Result | MS<br>% Rec    | % Rec<br>Limits | Qualifiers  |
| Lipid   | %              | 3.7                              |                    | 3.8          |                |                 |             |
| SAMPLE DUPLICATE: 1681741   |                |                                  |                    |              |                |                 |             |
| Parameter   | Units          | 40157940015<br>Result            | Dup<br>Result      | RPD          | Max<br>RPD     | Qualifiers      |             |
| Lipid   | %              | 3.7                              | 3.7                | 1            | 40             |                 |             |
| SAMPLE DUPLICATE: 1681743   |                |                                  |                    |              |                |                 |             |
| Parameter   | Units          | 40157948011<br>Result            | Dup<br>Result      | RPD          | Max<br>RPD     | Qualifiers      |             |
| Lipid   | %              | 2.7                              | 2.8                | 6            | 40             |                 |             |
| SAMPLE DUPLICATE: 1681744   |                |                                  |                    |              |                |                 | -           |
| Parameter   | Units          | 40158017020<br>Result            | Dup<br>Result      | RPD          | Max<br>RPD     | Qualifiers      |             |
| Lipid   | %              | 2.9                              | 2.6                | 9            | 40             | ·               |             |
| SAMPLE DUPLICATE: 1681745   |                |                                  |                    |              |                |                 |             |
| Parameter   | Units          | 40158029004<br>Result            | Dup<br>Result      | RPD          | Max<br>RPD     | Qualifiers      |             |
| Lipid   | %              | 3.5                              | 3.7                | 4            | 40             |                 |             |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

### **REPORT OF LABORATORY ANALYSIS**

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36 of 859

Date: 05/10/2018 03:56 PM



Pace Analytical Services, LLC 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

#### **QUALIFIERS**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

#### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

#### **ANALYTE QUALIFIERS**

1q Sample was re-analyzed due to incorrect dilution.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

R1 RPD value was outside control limits.

S4 Surrogate recovery not evaluated against control limits due to sample dilution.

37 of 859

Date: 05/10/2018 03:56 PM

| SAM | PΙ       | E | $\cap$       |   |
|-----|----------|---|--------------|---|
|     | $\Gamma$ |   | $\mathbf{N}$ | ı |

U

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U

### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

| <br> |  |
|------|--|
| LCS  |  |

| Lab Name: Pag   | ce Analytical - Green Bay           | Contract: HUDSON RIVER REMEDIAL ACTION M |
|-----------------|-------------------------------------|--|
| Date Received:  |                                     | Matrix: Tissue SDG No.: 40157940         |
| Date Extracted: | 04/24/2018 07:41                    | Lab Sample ID: 1677644                   |
| Date Analyzed:  | 04/25/2018 15:13                    | Lab File ID: 042518.B\042518008.D        |
| Initial wt/vol: | 10 g Final wt/vol: 5 mL Dilution: 1 | Instrument: 40GCSJ Percent Moisture:     |
| CAS NO.         | COMPOUND                            | CONCENTRATION UNITS: ug/kg Q             |
| 12674-11-2      | PCB-1016 (Aroclor 1016)             | <11.4 U                                  |
| 11104-28-2      | PCB-1221 (Aroclor 1221)             | <11.4 U                                  |
|                 |                                     |  |

<11.4

<11.4

<11.4

<11.4

241

11141-16-5

53469-21-9

12672-29-6

11097-69-1

11096-82-5

PCB-1232 (Aroclor 1232)

PCB-1242 (Aroclor 1242)

PCB-1248 (Aroclor 1248)

PCB-1254 (Aroclor 1254)

PCB-1260 (Aroclor 1260)

### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

|     | <br> |
|-----|------|
| LCS |      |

| Lab Name: Pac     | Analytical - Green Bay Contract: HUDSON RIVER REMEDIAL ACTIO |                                   | CTION M |
|-------------------|--|-----------------------------------|---------|
| Date Received:    |  | Matrix: Tissue SDG No.: 40157940  |         |
| Date Extracted:   | 04/30/2018 10:28   | Lab Sample ID: 1681429            |         |
| Date Analyzed:    | 05/07/2018 14:54   | Lab File ID: 050718.B\050718007.D |         |
| Initial wt/vol: 1 | 0 gFinal wt/vol: 5 mLDilution: 1                             |                                   |         |
| CAS NO.           | COMPOUND   | CONCENTRATION UNITS: ug/kg        | Q       |
| 12674-11-2        | PCB-1016 (Aroclor 1016)                                      | <11.4                             | U       |
| 11104-28-2        | PCB-1221 (Aroclor 1221)                                      | <11.4                             | U       |
| 11141-16-5        | PCB-1232 (Aroclor 1232)                                      | <11.4                             | U       |
| 53469-21-9        | PCB-1242 (Aroclor 1242)                                      | 236                               |         |
| 12672-29-6        | PCB-1248 (Aroclor 1248)                                      | <11.4                             | U       |
| 11097-69-1        | PCB-1254 (Aroclor 1254)                                      | <11.4                             | U       |
| 11096-82-5        | PCB-1260 (Aroclor 1260)                                      | <11.4                             | U       |

# PCB - FORM III SVOA-1 TISSUE LABORATORY CONTROL SAMPLE RECOVERY

| Lab Name:    | Pace Analytical - Green Bay |
|--------------|-----------------------------|
| Date Extract | red: 04/24/2018             |
| Instrument:  | 40GCSJ                      |
| Lab File ID: | 042518.B\042518008.D        |

Lab Sample ID: 1677644LCS

Date Analyzed (1): 04/25/2018

LCS Lot No: 192096

SDG No.: 40157940

| COMPOUND                | AMOUNT ADDED (ug/kg) | LCS CONCENTRATION (ug/kg) | LCS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|----------------------|---------------------------|----------|----------------------|
| PCB-1242 (Aroclor 1242) | 250                  | 241                       | 96       | 70-130               |
|                         |                      | /                         | /        |                      |

Spike Recovery:  $\underline{0}$  out of  $\underline{1}$  outside limits.

05/14/2018 3:03 40157940 46 of 859

# PCB - FORM III SVOA-1 TISSUE LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - Green Bay

Date Extracted: 04/30/2018

Instrument: 40GCSK

Lab File ID: 050718.B\050718007.D

Lab Sample ID: 1681429LCS

Date Analyzed (1): 05/07/2018

LCS Lot No: 192096

SDG No.: 40157940

| COMPOUND                | AMOUNT ADDED (ug/kg) | LCS CONCENTRATION (ug/kg) | LCS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|----------------------|---------------------------|----------|----------------------|
| PCB-1242 (Aroclor 1242) | 250                  | 236                       | 94       | 70-130               |
|                         |                      |                           |          |                      |

Spike Recovery: \_0 out of \_1 outside limits.

05/14/2018 3:03

40157940 47 of 859

| SA | M | IP | LF | NO. |  |
|----|---|----|----|-----|--|
|    |   |    |    |     |  |

### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

| М | IS |  |
|---|----|--|

 Lab Name:
 Pace Analytical - Green Bay
 Contract:
 HUDSON RIVER REMEDIAL ACTION M

 Date Received:
 10/04/2017 14:05
 Matrix: Tissue
 SDG No.: 40157940

 Date Extracted:
 04/30/2018 10:28
 Lab Sample ID: 1681430

 Date Analyzed:
 05/07/2018 15:26
 Lab File ID: 050718.B\050718009.D

 Initial wt/vol:
 9.9846 g Final wt/vol: 5 mL Dilution: 20
 Instrument: 40GCSK Percent Moisture:

| CAS NO.    | COMPOUND                | CONCENTRATION UNITS: ug/kg | Q |
|------------|-------------------------|----------------------------|---|
| 12674-11-2 | PCB-1016 (Aroclor 1016) | <228                       | U |
| 11104-28-2 | PCB-1221 (Aroclor 1221) | 1220                       |   |
| 11141-16-5 | PCB-1232 (Aroclor 1232) | <228                       | U |
| 53469-21-9 | PCB-1242 (Aroclor 1242) | 1220                       |   |
| 12672-29-6 | PCB-1248 (Aroclor 1248) | 2890                       |   |
| 11097-69-1 | PCB-1254 (Aroclor 1254) | 1200                       |   |
| 11096-82-5 | PCB-1260 (Aroclor 1260) | 268                        | J |

### PCB - FORM III SVOA-1 TISSUE SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - Green Bay

Date Extracted: 04/30/2018

Instrument: 40GCSK

Parent Sample ID: ND2-170828-01-GOSH-02

Matrix Spike - Sample No: 1681430MS

Date Analyzed (1): 05/07/2018

Lab File ID: 050718.B\050718009.D

SDG No.: 40157940

| COMPOUND                | SPIKE ADDED<br>(ug/kg) | SAMPLE<br>CONCENTRATION (ug/kg) | MS CONCENTRATION (ug/kg) | MS %REC | QC<br>LIMITS<br>REC. |
|-------------------------|------------------------|---------------------------------|--------------------------|---------|----------------------|
| PCB-1242 (Aroclor 1242) | 250                    | <228                            | 1220                     | 487     | 70-130               |

Background > 4x Spike 62%

:- No goal

See attached sprendsheet

For re-calc-

Spike Recovery: \_1\_ out of \_1\_ outside limits.

05/14/2018 3:03

**Sample** ND2-170828-01-GOSH-02

**Wt** = 9.994

**DF** = 20

|       |        | Area   | Avg CF      | On Column       | Peak Result                | Aroclor Result          |
|-------|--------|--------|-------------|-----------------|----------------------------|-------------------------|
| A1242 | PCB-6  | 106724 | 2533198.700 | 0.04            | 422                        | <b>1066</b> ug/kg       |
|       | PCB-7  | 311128 | 2520033.450 | 0.12            | 1235                       |                         |
|       | PCB-8  | 759893 | 7116457.950 | 0.11            | 1068                       |                         |
|       | PCB-9  | 348557 | 3041534.650 | 0.11            | 1147                       |                         |
|       | PCB-10 | 298414 | 2047746.900 | 0.15            | 1458                       |                         |
|       |        |        |             | (Area / Avg CF) | (On Column * DF * 5000/Wt) | (Avg of 5 Peak Results) |

### Recalc MS %Rec

Spike Added 250 ug/kg Sample Conc. 1066 ug/kg MS Conc. 1220 ug/kg

MS %Rec **62**%

| SAMPLE NO. | MPLE NO. |
|------------|----------|
|------------|----------|

### PCB - FORM I SVOA-1 SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

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|----|-------|-----|--|--|
|    |       |     |  |  |
|    | _     | חוו |  |  |
|    | D     | UP  |  |  |
|    |       |     |  |  |

 Lab Name:
 Pace Analytical - Green Bay
 Contract:
 HUDSON RIVER REMEDIAL ACTION M

 Date Received:
 10/04/2017 14:05
 Matrix:
 Tissue
 SDG No.:
 40157940

 Date Extracted:
 04/30/2018 10:28
 Lab Sample ID:
 1681911

 Date Analyzed:
 05/07/2018 15:42
 Lab File ID:
 050718.B\050718010.D

 Initial wt/vol:
 9.9851 g Final wt/vol:
 5 mL
 Dilution:
 20
 Instrument:
 40GCSK
 Percent Moisture:

| CAS NO.    | COMPOUND                | CONCENTRATION UNITS: ug/kg | Q |
|------------|-------------------------|----------------------------|---|
| 12674-11-2 | PCB-1016 (Aroclor 1016) | <228                       | U |
| 11104-28-2 | PCB-1221 (Aroclor 1221) | 1040                       |   |
| 11141-16-5 | PCB-1232 (Aroclor 1232) | <228                       | U |
| 53469-21-9 | PCB-1242 (Aroclor 1242) | <228                       | U |
| 12672-29-6 | PCB-1248 (Aroclor 1248) | 2680                       |   |
| 11097-69-1 | PCB-1254 (Aroclor 1254) | 1150 🗸                     |   |
| 11096-82-5 | PCB-1260 (Aroclor 1260) | 280 🗸                      | J |

# PCB - FORM III SVOA-4 TISSUE SEMI-VOLATILE SAMPLE/DUPLICATE RECOVERY

| Lab Name: Pace Analytical - Green Bay | Duplicate Sample No: 40157940015DUP |  |  |  |  |  |
|---------------------------------------|-------------------------------------|--|--|--|--|--|
| Date Extracted: 04/30/2018            | Date Analyzed: 05/07/2018           |  |  |  |  |  |
| Instrument 40GCSK                     | Lab File ID: 050718.B\050718010.D   |  |  |  |  |  |
| Lab Sample ID: ND2-170828-01-GOSH-02  | SDG No.: 40157940                   |  |  |  |  |  |

| COMPOUND                | SAMPLE<br>CONCENTRATION (ug/kg) | DUPLICATE<br>CONCENTRATION (ug/kg) | RPD | RPD<br>LIMITS | LOB  |
|-------------------------|---------------------------------|------------------------------------|-----|---------------|------|
| PCB-1016 (Aroclor 1016) | <228                            | <228                               |     | 0-40          | 1000 |
| PCB-1221 (Aroclor 1221) | 996J                            | 1040                               |     | 0-40          | 1000 |
| PCB-1232 (Aroclor 1232) | <228                            | <228                               |     | 0-40          |      |
| PCB-1242 (Aroclor 1242) | <228                            | <228                               |     | 0-40          |      |
| PCB-1248 (Aroclor 1248) | 2930                            | 2680                               | 9   | 0-40          |      |
| PCB-1254 (Aroclor 1254) | 1260                            | 1150                               | 9 🗸 | 0-40          |      |
| PCB-1260 (Aroclor 1260) | 288J                            | 280J                               |     | 0-40          | 1000 |

A 2 20 €

RPD: 0 out of 2 outside limits.

# ICAL ? ICU 4015 1619 included in this support doc.

PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name:  | Pace Analytic | al - Gre    | en Bav I    | nstrument ID:            | 40GCSJ                         | GC Column         | : Col 1 S                | SDG <b>N</b> o.: 401                       | 57940        |
|--|---------------|-------------|-------------|--------------------------|--------------------------------|-------------------|--------------------------|--|--------------|
| Calibration  | *             | 03/06/20    | <del></del> | :/2018                   |                                | — Calibration Tir |                          | 12:07                                      | 19:39        |
| LAB FILE   | .,            | 70,00,20    |             | 72010                    |                                | Canbration in     |                          | 12.07                                      | 10.00        |
| CAL1A =  | 030618.B\0306 | 210050 D    | CAL         | 1D - 0206                | IO D\02064902                  |                   | NI 10 - 020              | 0640 D\0206400                             | 046 D        |
| CALIA =  | 030618.B\0306 |             | •           |                          | 18.B\030618022.D               |                   |                          | 0618.B\030618046.D                         |              |
| CAL2B =  | 030618.B\0306 |             |             |                          | 8.B\030618010<br> 8.B\03061804 |                   |                          | 30618.B\030618060.D<br>30618.B\030618036.D |              |
| CAL2F =  | 030618.B\0306 |             |             |                          |                                |                   |                          |  |              |
| CAL27 =  | 030618.B\0306 |             |             |                          | 8.B\030618062<br> 8.B\03061803 |                   |                          | 0618.B\0306180<br>0618.B\0306180           |              |
| CAL4A =  | 030618.B\0306 |             |             |                          | 18.B\030618028                 |                   |                          | 0618.B\0306180                             |              |
| CAL4D =  |               |             |             |                          | 8.B\030618016                  |                   |                          | 0618.B\0306180                             |              |
| CAL4D = 030618.B\030618040.D<br>CAL5B = 030618.B\030618030.D |               |             | <del></del> |                          | 8.B\030618054                  |                   |                          | 0618.B\0306180                             |              |
| CAL5F =  | 030618.B\0306 |             |             | 00 - <u>0000</u>         | 0.0103001003                   | <del>1</del> .D   | 120D - <u>030</u>        | 30 10.D 10300 10C                          | <u>'72.D</u> |
| COMPOUN  |               |             | CURVE TYPE  | CAL1                     | CAL2                           | CAL3              | CAL4                     | CAL5                                       |              |
|  | <del></del>   |             |             |                          |                                |                   |                          |  |              |
| Aroclor 10   |               | 1           | Averaged    | 3346700.00               | 3270300.00                     | 3026998.00        | 2916970.00               | 2843185.00                                 |              |
| Aroclor 10   |               | 2           | Averaged    | 3361310.00               | 3225075.00                     | 3064774.00        | 2953430.00               | 2890423.00                                 |              |
| Aroclor 10   |               | 3           | Averaged    | 9619090.00               | 9294970.00                     | 8629258.00        | 8432580.00               | 8333033.00                                 |              |
| Aroclor 10   |               | 4           | Averaged    | 4072990.00               | 3972810.00                     | 3750126.00        | 3581221.25               | 3523970.00                                 |              |
| Aroclor 10   |               | 5           | Averaged    | 2912980.00               | 2694260.00                     | 2551278.00        | 2433447.50               | 2424781.00                                 |              |
| Aroclor 12:  |               | 1           | Averaged    | 1168840.00               | 1110755.00                     | 980478.000        | 981937.500               | 964273.000                                 |              |
| Aroclor 12:  |               | 2           | Averaged    | 612180.000               | 587450.000                     | 526622.000        | 511427.500               | 501535.000                                 |              |
| Aroclor 12:  |               | 3           | Averaged    | 1505110.00               | 1446635.00                     | 1316246.00        | 1333917.50               | 1314775.00                                 |              |
| Aroclor 12:  |               | 4           | Averaged    | 1181440.00               | 1150255.00                     | 1038526.00        | 1067413.75               | 1091213.00                                 |              |
| Aroclor 12   |               | 5           | Averaged    | 3492190.00               | 3470535.00                     | 3167038.00        | 3088411.25               | 3058814.00                                 |              |
| Aroclor 12   |               | 1           | Averaged    | 2772560.00               | 2688000.00                     | 2505132.00        | 2371062.50               | 2329239.00                                 |              |
| Aroclor 12   |               | 2           | Averaged    | 2739500.00               | 2600755.00                     | 2506348.00        | 2392166.25               | 2361398.00                                 |              |
| Aroclor 12   |               | 3           | Averaged    | 7695890.00               | 7473100.00                     | 6971326.00        | 6735328.75               | 6706645.00                                 |              |
| Aroclor 12   |               | 4           | Averaged    | 3287540.00               | 3169245.00                     | 3017986.00        | 2875101.25               | 2857801.00                                 |              |
| Aroclor 12   |               | 5           | Averaged    | 2247420.00               | 2077595.00                     | 2062930.00        | 1928282.50               | 1922507.00                                 |              |
| Aroclor 12   |               | 1           | Averaged    | 2522640.00               | 2478140.00                     | 2346396.00        | 2184111.25               | 2183582.00                                 |              |
| Aroclor 12   |               | 2           | Averaged    | 4441400.00               | 4466680.00                     | 4104774.00        | 3847133.75               | 3891542.00                                 |              |
| Aroclor 124  |               | 3           | Averaged    | 2175950.00               | 2100970.00                     | 2034380.00        | 1911980.00               | 1927121.00                                 |              |
|  |               | 4           | Averaged    | 5384910.00               | 5302865.00                     | 5054976.00        | 4695606.25               | 4748871.00                                 |              |
| Aroclor 124  |               | 5           | Averaged    | 3757360.00               | 3770200.00                     | 3588002.00        | 3386248.75               | 3440920.00                                 |              |
| Aroclor 12   |               | 1           | Averaged    | 5783370.00               | 5652575.00                     | 5120584.00        | 4858101.25               | 4761607.00<br>4016994.00                   |              |
| Aroclor 12   |               | 2           | Averaged    | 4616750.00<br>8435240.00 | 4581855.00                     | 4225042.00        | 4064631.25               |  |              |
| Aroclor 12   |               | 3           | Averaged    |                          | 8286960.00                     | 7623568.00        | 7277021.25               | 7207530.00                                 |              |
| Aroclor 12   |               | 4           | Averaged    | 5140880.00<br>7015020.00 | 5151350.00                     | 4826428.00        | 4638268.75               | 4591491.00                                 |              |
| Aroclor 126  |               | 5           | Averaged    |                          | 6981970.00                     | 6368818.00        | 6122333.75               | 6047377.00                                 |              |
| Aroclor 126  |               | 2           | Averaged    | 9569990.00               | 9323545.00                     | 9816406.00        | 8388552.50<br>9526972.50 | 8372147.00<br>9552528.00                   |              |
| Aroclor 126  |               | <del></del> | Averaged    | 10746610.0               | 10429350.0                     | <del> </del>      |                          | 4561709.00                                 |              |
| Aroclor 126  |               | 3           | Averaged    | 5052370.00               | 4986225.00                     | 4721308.00        | 4577403.75               |  |              |
| 7100101 120  | JU            | 4           | Averaged    | 3131020.00               | 3037915.00                     | 2887698.00        | 2771190.00               | 2747730.00                                 | I            |

### PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name:                    | _ab Name: Pace Analytical - Green Bay Instrument ID: 40GCSJ GC Column: Col 1 SDG No.: 40157940 |          |        |                                  |                                  |                            |                  |                   |                          |                      |                      |             |       |
|------------------------------|--|----------|--------|----------------------------------|----------------------------------|----------------------------|------------------|-------------------|--------------------------|----------------------|----------------------|-------------|-------|
| Calibration                  | Date(s):0  | 3/06/20  | 18(    | 03/06                            | /2018                            | _                          |                  | Calibration       | Time                     | e(s): _              | 1:                   | 2:07        | 19:39 |
| LAB FILE                     | ID   |          |        |                                  |                                  |                            |                  |                   |                          |                      |                      |             |       |
| CAL1A =                      | 030618.B\0306  | 318058.D | )      | CAL1                             | IB=                              | 03061                      | 8.B\03061802     | 2.D               | CAL                      | 1C =                 | 030618.B\030618046.D |             | 046.D |
| CAL1D =                      | CAL1D = 030618.B\030618034.D   |          | )      | CAL1                             | F=                               | F = 030618.B\030618010.D C |                  | CAL               | 2A =                     | 030618.B\030618060.D |                      |             |       |
| CAL2B = 030618.B\030618024.D |  |          | CAL2   | 2C =                             | 03061                            | 8.B\03061804               | 8.D              | CAL               | 2D =                     | 030618.B\030618036.D |                      |             |       |
| CAL2F =                      | CAL2F = 030618.B\030618012.D   |          | CAL    | BA = <u>030618.B\030618062.D</u> |                                  | 2.D                        | CAL              | CAL3B = <u>03</u> |                          | 030618.B\030618026.D |                      |             |       |
| CAL3C =                      | = 030618.B\030618050.D   |          | )      | CAL                              | AL3D = <u>03061</u>              |                            | 18.B\030618038.D |                   | CAL                      | 3F =                 | 0306                 | 18.B\030618 | 014.D |
| CAL4A =                      | CAL4A = 030618.B\030618064.D   |          | )      | CAL4                             | 4B = <u>030618.B\030618028.D</u> |                            | CAL              | 4C =              | 0306                     | 18.B\030618          | 052.D                |             |       |
| CAL4D =                      | 030618.B\0306  | 18040.E  |        | CAL4                             | 4F = 030618.B\030618016.D        |                            | 6.D              | CAL               | CAL5A = <u>030</u>       |                      | 030618.B\030618066.D |             |       |
| CAL5B =                      | 030618.B\0306  | 18030.D  | 1      | CAL5                             | 5C = 030618.B\030618054.D CAL5   |                            |                  | 5D =              | D = 030618.B\030618042.D |                      |                      |             |       |
| CAL5F =                      | 030618.B\0306  | 18018.D  | )      |                                  |                                  |                            |                  |                   |                          |                      |                      |             |       |
| COMPOUND PEAK CURVE          |  | CURVE T  | YPE    | CA                               | L1                               | CAL2                       | CAL3             |                   | CAL4                     |                      | CAL5                 |             |       |
| Aroclor 12                   | Aroclor 1260 5 Avera   |          | Averag | jed                              | 28535                            | 90.00                      | 2718235.00       | 2625044.0         | 00 2                     | 2511683.             | 75                   | 2485127.00  |       |
| Decachlor                    | obiphenyl (S)  |          | Averag | jed                              | 12522                            | 3400.                      | 114228350.       | 10625502          | 5020. 1016022            |                      | 50.                  | 100490933.  |       |
| Tetrachlor                   | o-m-xylene   |          | Averag | jed                              | 12655                            | 0100.                      | 124974300.       | 12114474          | 0. 1                     | 2180955              | 50.                  | 121996840.  |       |

### PCB - FORM VI SVOA-3 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name:   | Pace Analytic | al - Gre | en Bay In            | strument ID:     | 40GCSJ        | GC Colu     | mn: Col 1 | SD   | G No.: 401                                   | 57940 |
|-------------|---------------|----------|----------------------|------------------|---------------|-------------|-----------|------|--|-------|
| Calibration | Date(s):      | 03/06/20 | 18 03/06/            | 2018             |               | Calibration | Time(s):  | 12   | 2:07   | 19:39 |
| LAB FILE    | ID            |          |                      |                  |               |             |           |      |  |       |
| CAL1A =     | 030618.B\0306 | 618058.D | CAL1                 | B = <u>03061</u> | 8.B\03061802  | 2.D         | CAL1C =   | 0306 | 18.B\0306180                                 | )46.D |
| CAL1D =     | 030618.B\0306 | 318034.D | CAL1                 | F = <u>03061</u> | 8.B\03061801  | 0.D         | CAL2A =   | 0306 | 18.B\0306180                                 | 060.D |
| CAL2B =     | 030618.B\0306 | 318024.D | CAL2                 | C = <u>03061</u> | 8.B\030618048 | 8.D         | CAL2D =   | 0306 | 18.B\0306180                                 | )36.D |
| CAL2F =     | 030618.B\0306 | 618012.D | CAL3                 | A = <u>03061</u> | 8.B\030618062 | 2.D         | CAL3B =   | 0306 | 18.B\0306180                                 | )26.D |
| CAL3C =     | 030618.B\0306 | 618050.D | CAL3                 | D = <u>03061</u> | 8.B\030618038 | 8.D         | CAL3F =   | 0306 | 18.B\0306180                                 | )14.D |
| CAL4A =     | 030618.B\0306 | 518064.D | CAL4                 | B = <u>03061</u> | 8.B\030618028 | 8.D         | CAL4C =   | 0306 | 18.B\0306180                                 | )52.D |
| CAL4D =     | 030618.B\0306 | 618040.D | CAL4                 | F = <u>03061</u> | 8.B\030618016 | 6.D         | CAL5A =   | 0306 | 18.B\0306180                                 | )66.D |
| CAL5B =     | 030618.B\0306 | 618030.D | CAL5                 | C = <u>03061</u> | 8.B\030618054 | 4.D         | CAL5D =   | 0306 | 18.B\0306180                                 | )42.D |
| CAL5F =     | 030618.B\0306 | 318018.D | 1                    |                  |               | .,          |           |      |  | 1     |
| COMPOUN     | ND            | PEAK     | CURVE TYPE           | %RSD             | R2            | A1          | A2        |      | АЗ   |       |
| Aroclor 10  | 16            | 1        | Averaged             | 7.12             |               |             | 308083    | 0.60 |  |       |
| Aroclor 10  | 16            | 2        | Averaged             | 6.26             |               |             | 309900    | 2.40 |  |       |
| Aroclor 10  | 16            | 3        | Averaged             | 6.38             |               |             | 886178    | 6.20 |  |       |
| Aroclor 10  | 16            | 4        | Averaged             | 6.32             |               |             | 378022    | 3.45 |  |       |
| Aroclor 10  | 16            | 5        | Averaged             | 7.86             |               |             | 260334    | 9.30 |  |       |
| Aroclor 122 | 21            | 1        | Averaged             | 8.88             |               |             | 104125    | 6.70 |  |       |
| Aroclor 122 | 21            | 2        | Averaged             | 8.95             |               |             | 547842    | 2.90 |  |       |
| Aroclor 122 | 21            | 3        | Averaged             | 6.31             |               |             | 138333    | 6.70 |  |       |
| Aroclor 122 | 21            | 4        | Averaged             | 5.33             |               |             | 110576    | 9.55 |  |       |
| Aroclor 122 | 21            | 5        | Averaged             | 6.45             |               |             | 325539    | 7.65 | 1241-20-20-00-00-00-00-00-00-00-00-00-00-00- |       |
| Aroclor 124 |               | 1        | Averaged             | 7.64             |               |             | 253319    | 8.70 |  |       |
| Aroclor 124 | 12            | 2        | Averaged             | 6.15             |               |             | 252003    | 3.45 |  |       |
| Aroclor 124 |               | 3        | Averaged             | 6.27             |               |             | 711645    | 7.95 |  |       |
| Aroclor 124 |               | 4        | Averaged             | 6.12             |               |             | 304153    |      |  |       |
| Aroclor 124 | *****         | 5        | Averaged             | 6.50             |               |             | 204774    |      |  |       |
| Aroclor 124 |               | 1        | Averaged             | 6.78             |               |             | 234297    |      |  |       |
| Aroclor 124 |               | 2        | Averaged             | 7.08             |               |             | 415030    |      |  |       |
| Aroclor 124 |               | 3        | Averaged             | 5.55             |               |             | 203008    |      |  |       |
| Aroclor 124 |               | 4        | Averaged             | 6.21             |               |             | 503744    |      |  |       |
| Aroclor 124 | 70.00         | 5        | Averaged             | 4.91             |               |             | 358854    |      |  |       |
| Aroclor 125 |               | 1        | Averaged             | 8.82             |               |             | 523524    |      |  |       |
| Aroclor 125 |               | 2        | Averaged             | 6.58             |               |             | 430105    |      |  |       |
| Aroclor 125 |               | 3        | Averaged             | 7.31             |               |             | 776606    |      |  |       |
| Aroclor 125 |               | 4        | Averaged             | 5.48             |               | -           | 4869683   |      |  |       |
| Aroclor 126 | ·             | 5        | Averaged             | 7.13             |               |             | 6507103   |      |  |       |
| Aroclor 126 |               | 1        | Averaged             | 6.23             |               |             | 886235    |      |  |       |
| Aroclor 126 |               | 3        | Averaged<br>Averaged | 5.46             |               |             | 4779803   |      |  |       |
| Aroclor 126 | *             | 4        |                      | 4.78<br>5.71     |               | -           | 291511    |      |  |       |
| 71000 120   |               | 4        | Averaged             | 5.71             |               | L           | 2915111   | 0.00 |  |       |

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

# PCB - FORM VI SVOA-4 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name                     | : Pace Analytic              | cal - Gre | en Bay  | Instru                       | ıment ID:                             | 40GCSJ      | GC Colu     | ımn: Col 1           | SD                   | OG No.: 401          | 57940 |
|------------------------------|------------------------------|-----------|---------|------------------------------|---------------------------------------|-------------|-------------|----------------------|----------------------|----------------------|-------|
| Calibration                  | Date(s):(                    | 23/06/20  | 18 0    | 3/06/201                     | 8                                     |             | Calibration | Time(s):             | 1                    | 2:07                 | 19:39 |
| LAB FILE                     | ID                           |           |         |                              |                                       |             |             |                      |                      |                      |       |
| CAL1A =                      | 030618.B\0306                | 618058.D  | )       | CAL1B = 030618.B\030618022.D |                                       | CAL1C =     | 0306        | 030618.B\030618046.D |                      |                      |       |
| CAL1D =                      | CAL1D = 030618.B\030618034.D |           | )(      | CAL1F =                      | 03061                                 | 8.B\0306180 | 10.D        | CAL2A =              | 0306                 | 030618.B\030618060.D |       |
| CAL2B = 030618.B\030618024.D |                              |           | )       | CAL2C =                      | 03061                                 | 8.B\0306180 | 48.D        | CAL2D =              | 030618.B\030618036.D |                      |       |
| CAL2F =                      | CAL2F = 030618.B\030618012.D |           |         | CAL3A =                      | = <u>030618.B\030618062.D</u> CAL3B = |             |             | CAL3B =              | 030618.B\030618026.D |                      |       |
| CAL3C =                      | = 030618.B\030618050.D       |           | )       | CAL3D =                      | CAL3D = <u>030618.B\030618038.D</u>   |             | 38.D        | CAL3F =              | 0306                 | 318.B\0306180        | 014.D |
| CAL4A =                      | = 030618.B\030618064.D       |           | )       | CAL4B =                      | B = 030618.B\030618028.D              |             | CAL4C =     | 0306                 | S18.B\0306180        | )52.D                |       |
| CAL4D =                      | 030618.B\0306                | 618040.E  | )       | CAL4F =                      | AL4F = 030618.B\030618016.D           |             | CAL5A =     | 030618.B\030618066.D |                      | 066.D                |       |
| CAL5B =                      | 030618.B\0306                | 618030.E  | )       | CAL5C =                      | L5C = 030618.B\030618054.D            |             | CAL5D =     | 0306                 | 030618.B\030618042.D |                      |       |
| CAL5F =                      | 030618.B\0306                | 618018.D  | )       |                              |                                       | ,           |             |                      |                      |                      | 1     |
| сомрои                       | ND                           | PEAK      | CURVE T | YPE 9                        | %RSD                                  | R2          | A1          | A2                   |                      | А3                   |       |
| Aroclor 12                   | 60                           | 5         | Average | ed                           | 5.76                                  |             |             | 263873               | 5.95                 |                      |       |
| Decachlor                    | obiphenyl (S)                |           | Average | ed                           | 9.39                                  |             |             | 1095599              | 990.6                |                      |       |
| Tetrachlor                   | o-m-xylene                   |           | Average | ed                           | 1.89                                  |             |             | 123295               | 106.0                |                      | 1     |

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

05/14/2018 4:19 40157940 239 of 859

# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name:   | Pace Analytic | al - Gree | n Bay | _ Instrume | ent ID: 400          | GCSJ G     | C Colur | nn: ( | Col 1 | _SDG No.: 4    | 0157940 |  |
|---|---------------|-----------|-------|------------|----------------------|------------|---------|-------|-------|----------------|---------|--|
| Calibration                                       | Date(s):0     | 3/06/201  | 18 03 | /06/2018   | _                    | Calil      | oration | Time  | (s):  | 12:07          | 19:39   |  |
| LAB FILE I  | ID            |           |       |            |                      |            |         |       |       |                |         |  |
| CAL1A =   | 030618.B\0306 | 618058.D  | C     | AL1B =     | 030618.B\030618022.D |            |         |       | 1C =  | 030618.B\0306  | 18046.D |  |
| CAL1D =   | 030618.B\0306 | 518034.D  | С     | AL1F =     | 030618.B\0           | 30618010.D |         | CAL   | 2A =  | 030618.B\0306  | 18060.D |  |
| CAL2B =   | 030618.B\0306 | 518024.D  | C     | AL2C =     | 030618.B\0           | 30618048.D |         | CAL   | 2D =  | 030618.B\0306  | 18036.D |  |
| CAL2F =   | 030618.B\0306 | 318012.D  | C     | AL3A =     | 030618.B\0           | 30618062.D |         | CAL   | 3B =  | 030618.B\0306  | 18026.D |  |
| CAL3C =   | 030618.B\0306 | 618050.D  | C     | AL3D =     | 030618.B\0           | 30618038.D |         | CAL   | 3F =  | 030618.B\0306  | 18014.D |  |
| CAL4A =   | 030618.B\0306 | 318064.D  | C     | AL4B =     | 030618.B\0           | 30618028.D |         | CAL   | 1C =  | 030618.B\0306  | 18052.D |  |
| CAL4D =   | 030618.B\0306 | 818040.D  | c     | AL4F =     | 030618.B\0           | 30618016.D |         | CALS  | 5A =  | 030618.B\0306  | 18066.D |  |
| CAL5B =   | 030618.B\0306 | 518030.D  | C     | AL5C =     | 030618.B\0           | 30618054.D |         | CAL   | 5D =  | 030618.B\03061 | 18042.D |  |
| CAL5F = 030618.B\030618018.D                      |               |           |       |            |                      |            |         |       |       |                |         |  |
| RT WINDOW   |               |           |       |            |                      |            |         |       |       |                |         |  |
| COMPOUND PEAK CAL1 CAL2 CAL3 CAL4 CAL5 RT FROM TO |               |           |       |            |                      |            |         |       |       |                |         |  |
| Aroclor 101                                       | 16            | 1         | 3.318 | 3.317      | 3.317                | 3.317      | 3.3     | 18    | 3.318 | 3.284          | 3.352   |  |
| Aroclor 101                                       | 16            | 2         | 3.513 | 3.513      | 3.512                | 3.512      | 3.5     | 12    | 3.512 | 2 3.478        | 3.546   |  |
| Aroclor 101                                       | 16            | 3         | 3.826 | 3.826      | 3.826                | 3.826      | 3.8     | 26    | 3.826 | 3.792          | 3.86    |  |
| Aroclor 101                                       | 16            | 4         | 3.928 | 3.929      | 3.928                | 3.929      | 3.9     | 28    | 3.929 | 3.895          | 3.963   |  |
| Aroclor 101                                       | 16            | 5         | 3.995 | 3.994      | 3.994                | 3.995      | 3.9     | 94    | 3.994 | 4 3.96         | 4.028   |  |
| Aroclor 122                                       | 21            | 1         | 1.803 | 1.804      | 1.804                | 1.804      | 1.8     | 06    | 1.804 | 1.77           | 1.838   |  |
| Aroclor 122                                       | 21            | 2         | 2.406 | 2.407      | 2.407                | 2.407      | 2.4     | 07    | 2.40  | 7 2.373        | 2.441   |  |
| Aroclor 122                                       | 21            | 3         | 2.687 | 2.688      | 2.688                | 2.688      | 2.6     | 88    | 2.688 | 3 2.654        | 2.722   |  |
| Aroclor 122                                       | 21            | 4         | 2.789 | 2.789      | 2.79                 | 2.789      | 2.7     | 89    | 2.789 | 2.755          | 2.823   |  |
| Aroclor 122                                       | 21            | 5         | 2.851 | 2.851      | 2.851                | 2.851      | 2.8     | 51    | 2.85  | 1 2.817        | 2.885   |  |
| Aroclor 124                                       | 42            | 1         | 3.318 | 3.318      | 3.317                | 3.318      | 3.3     | 18    | 3.318 | 3.284          | 3.352   |  |
| Aroclor 124                                       | 42            | 2         | 3.513 | 3.513      | 3.513                | 3.513      | 3.5     | 13    | 3.513 | 3.479          | 3.547   |  |
| Aroclor 124                                       | 42            | 3         | 3.826 | 3.826      | 3.827                | 3.827      | 3.8     | 27    | 3.827 | 7 3.793        | 3.861   |  |
| Aroclor 124                                       | 42            | 4         | 3.928 | 3.929      | 3.929                | 3.93       | 3.9     | 29    | 3.929 | 3.895          | 3.963   |  |
| Aroclor 124                                       | 42            | 5         | 3.995 | 3.994      | 3.995                | 3.995      | 3.9     | 94    | 3.99  | 3.961          | 4.029   |  |
| Aroclor 124                                       | 48            | 1         | 4.261 | 4.261      | 4.261                | 4.261      | 4.20    | 61    | 4.26  | 1 4.227        | 4.295   |  |
| Aroclor 124                                       | 48            | 2         | 4.546 | 4.545      | 4.545                | 4.545      | 4.5     | 45    | 4.546 | 4.512          | 4.58    |  |
| Aroclor 124                                       | 48            | 3         | 4.814 | 4.813      | 4.813                | 4.813      | 4.8     | 13    | 4.812 | 2 4.778        | 4.846   |  |
| Aroclor 124                                       | 48            | 4         | 4.879 | 4.878      | 4.879                | 4.878      | 4.8     | 79    | 4.879 | 4.845          | 4.913   |  |
| Aroclor 124                                       | 48            | 5         | 5.037 | 5.036      | 5.037                | 5.038      | 5.0     | 37    | 5.038 | 5.004          | 5.072   |  |
| Aroclor 125                                       | 54            | 1         | 5.163 | 5.162      | 5.163                | 5.162      | 5.10    | 63    | 5.162 | 5.128          | 5.196   |  |
| Aroclor 125                                       | 54            | 2         | 5.408 | 5.407      | 5.407                | 5.407      | 5.4     | 07    | 5.408 | 5.374          | 5.442   |  |
| Aroclor 125                                       |               | 3         | 5.51  | 5.51       | 5.51                 | 5.509      | 5.5     | 1     | 5.51  | 5.476          | 5.544   |  |
| Aroclor 125                                       |               | 4         | 6.026 | 6.026      | 6.026                | 6.027      | 6.0     | 27    | 6.027 |                | 6.061   |  |
| Aroclor 125                                       |               | 5         | 6.299 | 6.299      | 6.299                | 6.299      | 6.29    | 99    | 6.299 | 6.265          | 6.333   |  |
| Aroclor 126                                       |               | 1         | 6.3   | 6.3        | 6.299                | 6.3        | 6.29    |       | 6.3   | 6.266          | 6.334   |  |
| Aroclor 126                                       |               | 2         | 7.006 | 7.006      | 7.005                | 7.005      | 7.0     |       | 7.006 |                | 7.04    |  |
| Aroclor 126                                       | 60            | 3         | 7.252 | 7.252      | 7.251                | 7.252      | 7.2     | 51    | 7.25  | 7.217          | 7.285   |  |

# PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name                     | Pace Analytic                | cal - Gree | en Bay      | Instrume                   | ent ID: 40G0 | <u>CSJ</u> GC | Column:       | Col 1         | SDG No.: 4    | 0157940 |
|------------------------------|------------------------------|------------|-------------|----------------------------|--------------|---------------|---------------|---------------|---------------|---------|
| Calibration                  | Date(s):                     | 03/06/20   | 18(         | 03/06/2018                 | _            | Calib         | ration Time   | e(s):         | 12:07         | 19:39   |
| LAB FILE                     | ID                           |            |             |                            |              |               |               |               |               |         |
| CAL1A =                      | 030618.B\0306                | 318058.D   |             | _ CAL1B =030618.           |              | 0618022.D     | CAL           | 1C = <u>0</u> | 30618.B\03061 | 18046.D |
| CAL1D =                      | AL1D = 030618.B\030618034.D  |            |             | CAL1F = 030618.B\030618010 |              | 0618010.D     | CAL2A =       |               | 30618.B\03061 | 18060.D |
| CAL2B =                      | CAL2B = 030618.B\030618024.D |            |             | CAL2C =                    | 030618.B\030 | 0618048.D     | CAL           | 2D = <u>0</u> | 30618.B\03061 | 18036.D |
| CAL2F = 030618.B\030618012.D |                              |            | CAL3A =     | 030618.B\030               | 0618062.D    | CAL           | 3B = <u>0</u> | 30618.B\03061 | 18026.D       |         |
| CAL3C = 030618.B\030618050.D |                              |            | CAL3D =     | 030618.B\030618038.D       |              | CAL           | 3F = <u>0</u> | 30618.B\03061 | 18014.D       |         |
| CAL4A = 030618.B\030618064.D |                              |            | CAL4B =     | 030618.B\03                | 0618028.D    | CAL           | 4C = <u>0</u> | 30618.B\03061 | 18052.D       |         |
| CAL4D =                      | 030618.B\0306                | 318040.D   |             | CAL4F =                    | 030618.B\030 | 0618016.D     | CAL           | 5A = <u>0</u> | 30618.B\03061 | 18066.D |
| CAL5B =                      | 030618.B\0306                | 318030.D   |             | CAL5C =                    | 030618.B\03  | 0618054.D     | CAL           | 5D = <u>0</u> | 30618.B\03061 | 18042.D |
| CAL5F =                      | 030618.B\0306                | 318018.D   | *********** |                            |              |               |               |               |               |         |
| 400                          | MPOUND                       | DEAK       | CAL 1       | CALO                       | CALO         | CALA          | CALE          | рт            | RT WI         | NDOW    |
| CON                          | MECOND                       | PEAK       | CAL1        | CAL2                       | CAL3         | CAL4          | CAL5          | RT            | FROM          | TO      |
| Aroclor 12                   | 60                           | 4          | 7.444       | 7.443                      | 7.443        | 7.443         | 7.443         | 7.443         | 7.409         | 7.477   |
| Aroclor 12                   | 60                           | 5          | 7.902       | 7.9                        | 7.901        | 7.901         | 7.9           | 7.901         | 7.867         | 7.935   |
| Decachlor                    | obiphenyl (S)                |            | 8.572       | 8.572                      | 8.571        | 8.571         | 8.571         | 8.571         | 8.537         | 8.605   |
| Tetrachlor                   | o-m-xylene                   |            | 2.485       | 2.484                      | 2.484        | 2.484         | 2.485         | 2.484         | 2.45          | 2.518   |

# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION DATA (SINGLE POINT)

| Lab Name: Pace Analytical - Green Bay | Instrument ID: 40GCSJ | GC Column: Col 1     | SDG No.: 40157940 |  |
|---------------------------------------|-----------------------|----------------------|-------------------|--|
| Calibration Date(s): 03/06/2018       |                       | Calibration Time(s): | 11:50             |  |
| LAB FILE ID                           |                       |                      |                   |  |
| CAL3S = 030618.B\030618008.D          |                       |                      |                   |  |

| COMPOUND     | AMOUNT | DEAK | ОТ    | RT WII | NDOW  | RESPONSE   |  |
|--------------|--------|------|-------|--------|-------|------------|--|
|              | AMOUNT | PEAK | RT    | FROM   | TO    | FACTOR     |  |
| Aroclor 1232 | .5     | 1    | 2.851 | 2.817  | 2.885 | 2500024.00 |  |
| Aroclor 1232 | .5     | 2    | 3.513 | 3.479  | 3.547 | 1339782.00 |  |
| Aroclor 1232 | .5     | 3    | 3.827 | 3.793  | 3.861 | 3749726.00 |  |
| Aroclor 1232 | .5     | 4    | 3.929 | 3.895  | 3.963 | 1606492.00 |  |
| Aroclor 1232 | .5     | 5    | 3.995 | 3.961  | 4.029 | 1091876.00 |  |



| Document Name:               | Document Revised:             |
|------------------------------|-------------------------------|
| PCB Calibration Low Standard | 23-Apr-2018                   |
| Document No.:                | Issuing Authority:            |
| F-GB-O-155-Rev.00            | Pace Green Bay Quality Office |

### **PCB Low Level Calibration % Difference Check**

Lab Name: Pace Analytical - Green Bay

Instrument ID: 40GCSJ

Calibration Date: 3/6/2018

|             |            | Abundance     |              | Acceptance |           |
|-------------|------------|---------------|--------------|------------|-----------|
| Aroclor     | True Value | Concentration | % Difference | Criteria % | Pass/Fail |
| AR1221-CAL1 | .1         | 0.109383      | 9.383        | 20         | Pass      |
| AR1242-CAL1 | .1         | 0.108828      | 8.828        | 20         | Pass      |
| AR1248-CAL1 | .1         | 0.106694      | 6.694        | 20         | Pass      |
| AR1254-CAL1 | .1         | 0.10796       | 7.96         | 20         | Pass      |
| AR1016-CAL1 | .1         | 0.109056      | 9.056        | 20         | Pass      |
| AR1260-CAL1 | .1         | 0.10731       | 7.31         | 20         | Pass      |

40157940 524 of 859

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10757904ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018 Time: 20:11

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 030618.B\030618070.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | рт    | RT WI | NDOW  | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | 70D     |
| Aroclor 1221           | 1    | Averaged | 1.804 | 1.77  | 1.838 | 1041256.70 | 1074308.00 | 3.1742  |
| Aroclor 1221           | 2    | Averaged | 2.407 | 2.373 | 2.441 | 547842.900 | 558458.000 | 1.9376  |
| Aroclor 1221           | 3    | Averaged | 2.688 | 2.654 | 2.722 | 1383336.70 | 1446642.00 | 4.5763  |
| Aroclor 1221           | 4    | Averaged | 2.789 | 2.755 | 2.823 | 1105769.55 | 1114194.00 | 0.7619  |
| Aroclor 1221           | 5    | Averaged | 2.851 | 2.817 | 2.885 | 3255397.65 | 3446964.00 | 5.8846  |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605 | 109559990. | 106438520. | -2.8491 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 119469080. | -3.1031 |

## PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10757932ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 20:27

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 030618.B\030618072.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | DT    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D    |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |
| Aroclor 1242           | 1    | Averaged | 3.317 | 3.284 | 3.352 | 2533198.70 | 2574948.00 | 1.6481  |
| Aroclor 1242           | 2    | Averaged | 3.513 | 3.479 | 3.547 | 2520033.45 | 2587724.00 | 2.6861  |
| Aroclor 1242           | 3    | Averaged | 3.825 | 3.793 | 3.861 | 7116457.95 | 7162442.00 | 0.6462  |
| Aroclor 1242           | 4    | Averaged | 3.928 | 3.895 | 3.963 | 3041534.65 | 3109342.00 | 2.2294  |
| Aroclor 1242           | 5    | Averaged | 3.993 | 3.961 | 4.029 | 2047746.90 | 2082504.00 | 1.6973  |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605 | 109559990. | 100680260. | -8.1049 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 117472720. | -4.7223 |

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10757923ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018

Time: 20:44

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 030618.B\030618074.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | рт    | RT WI | NDOW  | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAK | CORVE    | RT    | FROM  | ТО    | Amount     | Amount     | 70D     |
| Aroclor 1248           | 1    | Averaged | 4.261 | 4.227 | 4.295 | 2342973.85 | 2416006.00 | 3.1171  |
| Aroclor 1248           | 2    | Averaged | 4.545 | 4.512 | 4.58  | 4150305.95 | 4272006.00 | 2.9323  |
| Aroclor 1248           | 3    | Averaged | 4.813 | 4.778 | 4.846 | 2030080.20 | 2145142.00 | 5.6678  |
| Aroclor 1248           | 4    | Averaged | 4.879 | 4.845 | 4.913 | 5037445.65 | 5257174.00 | 4.3619  |
| Aroclor 1248           | 5    | Averaged | 5.037 | 5.004 | 5.072 | 3588546.15 | 3781714.00 | 5.3829  |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537 | 8.605 | 109559990. | 103468660. | -5.5598 |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45  | 2.518 | 123295106. | 117995220. | -4.2985 |

# PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10757930ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 03/06/2018 Time: 21:00

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 030618.B\030618076.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | PEAK | CURVE    | DT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAR | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |
| Aroclor 1254           | 1    | Averaged | 5.162 | 5.128 | 5.196 | 5235247.45 | 4908596.00 | -6.2395 |
| Aroclor 1254           | 2    | Averaged | 5.406 | 5.374 | 5.442 | 4301054.45 | 4023996.00 | -6.4416 |
| Aroclor 1254           | 3    | Averaged | 5.51  | 5.476 | 5.544 | 7766063.85 | 7114120.00 | -8.3948 |
| Aroclor 1254           | 4    | Averaged | 6.026 | 5.993 | 6.061 | 4869683.55 | 4559312.00 | -6.3735 |
| Aroclor 1254           | 5    | Averaged | 6.299 | 6.265 | 6.333 | 6507103.75 | 6351522.00 | -2.3910 |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605 | 109559990. | 103892160. | -5.1733 |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45  | 2.518 | 123295106. | 119128800. | -3.3791 |

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10757911ICV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 03/06/2018 Time: 21:16

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 030618.B\030618078.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40157940

| COMPOUND               | PEAK | CURVE    | DT    | RT WII | NDOW  | RRF or     | RRF or     | 0/ D    |
|------------------------|------|----------|-------|--------|-------|------------|------------|---------|
| COMPOUND               | PEAN | CURVE    | RT    | FROM   | TO    | Amount     | Amount     | %D      |
| Aroclor 1016           | 1    | Averaged | 3.317 | 3.284  | 3.352 | 3080830.60 | 3151828.00 | 2.3045  |
| Aroclor 1016           | 2    | Averaged | 3.512 | 3.478  | 3.546 | 3099002.40 | 3167044.00 | 2.1956  |
| Aroclor 1016           | 3    | Averaged | 3.826 | 3.792  | 3.86  | 8861786.20 | 9017370.00 | 1.7557  |
| Aroclor 1016           | 4    | Averaged | 3.928 | 3.895  | 3.963 | 3780223.45 | 3853260.00 | 1.9321  |
| Aroclor 1016           | 5    | Averaged | 3.994 | 3.96   | 4.028 | 2603349.30 | 2572474.00 | -1.1860 |
| Aroclor 1260           | 1    | Averaged | 6.3   | 6.266  | 6.334 | 8862352.50 | 8433522.00 | -4.8388 |
| Aroclor 1260           | 2    | Averaged | 7.005 | 6.972  | 7.04  | 10014373.3 | 10338502.0 | 3.2366  |
| Aroclor 1260           | 3    | Averaged | 7.251 | 7.217  | 7.285 | 4779803.15 | 4863954.00 | 1.7606  |
| Aroclor 1260           | 4    | Averaged | 7.442 | 7.409  | 7.477 | 2915110.60 | 2985660.00 | 2.4201  |
| Aroclor 1260           | 5    | Averaged | 7.901 | 7.867  | 7.935 | 2638735.95 | 2816390.00 | 6.7325  |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537  | 8.605 | 109559990. | 104964120. | -4.1948 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45   | 2.518 | 123295106. | 118641800. | -3.7741 |

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10924579CCV

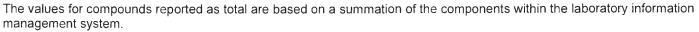
Lab Name: Pace Analytical - Green Bay Calibration Date: 04/25/2018 Time: 14:10

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 042518.B\042518004.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | рт    | RT WI | NDOW  | RRF or     | RRF or     | %D     |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|--------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D     |   |
| Aroclor 1248           | 1    | Averaged | 4.26  | 4.227 | 4.295 | 2342973.85 | 2530596.00 | 8.0079 | - |
| Aroclor 1248           | 2    | Averaged | 4.544 | 4.512 | 4.58  | 4150305.95 | 4398666.00 | 5.9841 |   |
| Aroclor 1248           | 3    | Averaged | 4.812 | 4.778 | 4.846 | 2030080.20 | 2206704.00 | 8.7003 | ı |
| Aroclor 1248           | 4    | Averaged | 4.878 | 4.845 | 4.913 | 5037445.65 | 5457508.00 | 8.3388 | , |
| Aroclor 1248           | 5    | Averaged | 5.036 | 5.004 | 5.072 | 3588546.15 | 3885012.00 | 8.2614 | - |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537 | 8.605 | 109559990. | 117438800. | 7.1913 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45  | 2.518 | 123295106. | 125746760. | 1.9884 |   |



# PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

SAMPLE NO.

10924570CCV

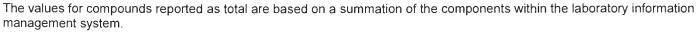
Lab Name: Pace Analytical - Green Bay Calibration Date: 04/25/2018 Time: 17:20

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 042518.B\042518016.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | PEAK | CURVE    | RT    | RT WINDOW |       | RRF or     | RRF or     | 0/ D   |   |
|------------------------|------|----------|-------|-----------|-------|------------|------------|--------|---|
|                        |      |          |       | FROM      | ТО    | Amount     | Amount     | %D     |   |
| Aroclor 1254           | 1    | Averaged | 5.161 | 5.128     | 5.196 | 5235247.45 | 5620066.00 | 7.3505 | Ų |
| Aroclor 1254           | 2    | Averaged | 5.405 | 5.374     | 5.442 | 4301054.45 | 4664408.00 | 8.4480 | 4 |
| Aroclor 1254           | 3    | Averaged | 5.509 | 5.476     | 5.544 | 7766063.85 | 8393614.00 | 8.0807 |   |
| Aroclor 1254           | 4    | Averaged | 6.026 | 5.993     | 6.061 | 4869683.55 | 5331866.00 | 9.4910 | J |
| Aroclor 1254           | 5    | Averaged | 6.297 | 6.265     | 6.333 | 6507103.75 | 7144636.00 | 9.7975 |   |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537     | 8.605 | 109559990. | 119497680. | 9.0705 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45      | 2.518 | 123295106. | 127691700. | 3.5659 |   |



## PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10929577CCV

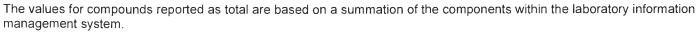
Lab Name: Pace Analytical - Green Bay Calibration Date: 04/25/2018 Time: 20:30

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

 Lab File ID:
 042518.B\042518028.D
 Init. Calib. Time(s):
 11:02
 19:39

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | RT    | RT WINDOW |       | RRF or     | RRF or     | %D     |        |
|------------------------|------|----------|-------|-----------|-------|------------|------------|--------|--------|
|                        | PEAK |          |       | FROM      | ТО    | Amount     | Amount     | %D     |        |
| Aroclor 1016           | 1    | Averaged | 3.317 | 3.284     | 3.352 | 3080830.60 | 3206322.00 | 4.0733 |        |
| Aroclor 1016           | 2    | Averaged | 3.511 | 3.478     | 3.546 | 3099002.40 | 3190680.00 | 2.9583 |        |
| Aroclor 1016           | 3    | Averaged | 3.825 | 3.792     | 3.86  | 8861786.20 | 9350570.00 | 5.5156 |        |
| Aroclor 1016           | 4    | Averaged | 3.928 | 3.895     | 3.963 | 3780223.45 | 3977920.00 | 5.2298 |        |
| Aroclor 1016           | 5    | Averaged | 3.993 | 3.96      | 4.028 | 2603349.30 | 2689516.00 | 3.3098 |        |
| Aroclor 1260           | 1    | Averaged | 6.298 | 6.266     | 6.334 | 8862352.50 | 9427436.00 | 6.3762 | 7      |
| Aroclor 1260           | 2    | Averaged | 7.004 | 6.972     | 7.04  | 10014373.3 | 10822446.0 | 8.0691 | $\neg$ |
| Aroclor 1260           | 3    | Averaged | 7.25  | 7.217     | 7.285 | 4779803.15 | 5192478.00 | 8.6337 | 7      |
| Aroclor 1260           | 4    | Averaged | 7.441 | 7.409     | 7.477 | 2915110.60 | 3141170.00 | 7.7547 | $\neg$ |
| Aroclor 1260           | 5    | Averaged | 7.9   | 7.867     | 7.935 | 2638735.95 | 2873146.00 | 8.8834 | 7      |
| Decachlorobiphenyl (S) |      | Averaged | 8.569 | 8.537     | 8.605 | 109559990. | 119173260. | 8.7744 |        |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45      | 2.518 | 123295106. | 125773600. | 2.0102 |        |



### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10929576CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 04/25/2018 Time: 22:21

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 042518.B\042518035.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | RT    | RT WINDOW |       | RRF or     | RRF or     | 0/ D    |        |
|------------------------|------|----------|-------|-----------|-------|------------|------------|---------|--------|
|                        | PEAK |          |       | FROM      | ТО    | Amount     | Amount     | %D      |        |
| Aroclor 1221           | 1    | Averaged | 1.805 | 1.77      | 1.838 | 1041256.70 | 1030802.00 | -1.0040 | $\neg$ |
| Aroclor 1221           | 2    | Averaged | 2.406 | 2.373     | 2.441 | 547842.900 | 525572.000 | -4.0652 | 1      |
| Aroclor 1221           | 3    | Averaged | 2.688 | 2.654     | 2.722 | 1383336.70 | 1419288.00 | 2.5989  | -      |
| Aroclor 1221           | 4    | Averaged | 2.789 | 2.755     | 2.823 | 1105769.55 | 1104446.00 | -0.1197 | 7      |
| Aroclor 1221           | 5    | Averaged | 2.85  | 2.817     | 2.885 | 3255397.65 | 3390106.00 | 4.1380  | V      |
| Decachlorobiphenyl (S) |      | Averaged | 8.57  | 8.537     | 8.605 | 109559990. | 115082560. | 5.0407  |        |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45      | 2.518 | 123295106. | 120420220. | -2.3317 |        |



The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10929690CCV

Lab Name: Pace Analytical - Green Bay

Calibration Date: 04/26/2018

Time: 13:24

Instrument ID: 40GCSJ GC Column: Col 1

Init. Calib. Date(s): 03/06/2018

03/06/2018

Lab File ID: 042618.B\042618004.D

Init. Calib. Time(s): 11:02

19:39

SDG No.: 40157940

| COMPOUND               | PEAK | CURVE    | RT    | RT WINDOW |       | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-----------|-------|------------|------------|---------|
|                        | FEAR |          |       | FROM      | ТО    | Amount     | Amount     | %D      |
| Aroclor 1232           | 1    | Averaged | 2.851 | 2.817     | 2.885 | 2500024.00 | 2906546.00 | 16.2607 |
| Aroclor 1232           | 2    | Averaged | 3.513 | 3.479     | 3.547 | 1339782.00 | 1515042.00 | 13.0812 |
| Aroclor 1232           | 3    | Averaged | 3.826 | 3.793     | 3.861 | 3749726.00 | 4311044.00 | 14.9696 |
| Aroclor 1232           | 4    | Averaged | 3.929 | 3.895     | 3.963 | 1606492.00 | 1847322.00 | 14.9910 |
| Aroclor 1232           | 5    | Averaged | 3.994 | 3.961     | 4.029 | 1091876.00 | 1230572.00 | 12.7025 |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537     | 8.605 | 109559990. | 119579340. | 9.1451  |
| Tetrachloro-m-xylene   |      | Averaged | 2.485 | 2.45      | 2.518 | 123295106. | 129761940. | 5.2450  |
|                        |      |          |       |           |       |            |            |         |



## PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10929689CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 04/26/2018 Time: 16:35

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 042618.B\042618016.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

|                        |      | W. Ja    |       | RT WI | NDOW  | RRF or     | RRF or     |        |
|------------------------|------|----------|-------|-------|-------|------------|------------|--------|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D     |
| Aroclor 1242           | 1    | Averaged | 3.318 | 3.284 | 3.352 | 2533198.70 | 2710848.00 | 7.0128 |
| Aroclor 1242           | 2    | Averaged | 3.514 | 3.479 | 3.547 | 2520033.45 | 2694942.00 | 6.9407 |
| Aroclor 1242           | 3    | Averaged | 3.826 | 3.793 | 3.861 | 7116457.95 | 7792916.00 | 9.5055 |
| Aroclor 1242           | 4    | Averaged | 3.929 | 3.895 | 3.963 | 3041534.65 | 3328866.00 | 9.4469 |
| Aroclor 1242           | 5    | Averaged | 3.994 | 3.961 | 4.029 | 2047746.90 | 2241012.00 | 9.4379 |
| Decachlorobiphenyl (S) |      | Averaged | 8.572 | 8.537 | 8.605 | 109559990. | 117860220. | 7.5760 |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 125581020. | 1.8540 |

## PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10931423CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: 04/27/2018 Time: 09:21

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018 03/06/2018

Lab File ID: 042718.B\042718005.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | PEAK | CURVE    | RT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | FEAR | CORVE    | KI    | FROM  | TO    | Amount     | Amount     | %D      |   |
| Aroclor 1016           | 1    | Averaged | 3.318 | 3.284 | 3.352 | 3080830.60 | 3311164.00 | 7.4763  |   |
| Aroclor 1016           | 2    | Averaged | 3.512 | 3.478 | 3.546 | 3099002.40 | 3324506.00 | 7.2767  | ٦ |
| Aroclor 1016           | 3    | Averaged | 3.827 | 3.792 | 3.86  | 8861786.20 | 9569930.00 | 7.9910  |   |
| Aroclor 1016           | 4    | Averaged | 3.929 | 3.895 | 3.963 | 3780223.45 | 4084788.00 | 8.0568  |   |
| Aroclor 1016           | 5    | Averaged | 3.994 | 3.96  | 4.028 | 2603349.30 | 2755316.00 | 5.8374  |   |
| Aroclor 1260           | 1    | Averaged | 6.3   | 6.266 | 6.334 | 8862352.50 | 9552624.00 | 7.7888  | 7 |
| Aroclor 1260           | 2    | Averaged | 7.005 | 6.972 | 7.04  | 10014373.3 | 10893446.0 | 8.7781  | J |
| Aroclor 1260           | 3    | Averaged | 7.252 | 7.217 | 7.285 | 4779803.15 | 5226980.00 | 9.3555  | 7 |
| Aroclor 1260           | 4    | Averaged | 7.443 | 7.409 | 7.477 | 2915110.60 | 3183828.00 | 9.2181  | 7 |
| Aroclor 1260           | 5    | Averaged | 7.901 | 7.867 | 7.935 | 2638735.95 | 2876820.00 | 9.0227  | - |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605 | 109559990. | 120662260. | 10.1335 | ٦ |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 131029680. | 6.2732  |   |

## PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

SAMPLE NO.

10931422CCV

03/06/2018

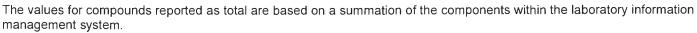
Lab Name: Pace Analytical - Green Bay Calibration Date: 04/27/2018 Time: 12:04

Instrument ID: 40GCSJ GC Column: Col 1 Init. Calib. Date(s): 03/06/2018

Lab File ID: 042718.B\042718014.D Init. Calib. Time(s): 11:02 19:39

SDG No.: 40157940

| COMPOUND               | DEAK | OUD) (E  | DT    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D   |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|--------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | TO    | Amount     | Amount     | %D     |   |
| Aroclor 1221           | 1    | Averaged | 1.804 | 1.77  | 1.838 | 1041256.70 | 1100886.00 | 5.7267 | 7 |
| Aroclor 1221           | 2    | Averaged | 2.406 | 2.373 | 2.441 | 547842.900 | 565428.000 | 3.2099 | V |
| Aroclor 1221           | 3    | Averaged | 2.687 | 2.654 | 2.722 | 1383336.70 | 1496442.00 | 8.1763 | Ψ |
| Aroclor 1221           | 4    | Averaged | 2.789 | 2.755 | 2.823 | 1105769.55 | 1162706.00 | 5.1490 | - |
| Aroclor 1221           | 5    | Averaged | 2.85  | 2.817 | 2.885 | 3255397.65 | 3574620.00 | 9.8059 | 7 |
| Decachlorobiphenyl (S) |      | Averaged | 8.571 | 8.537 | 8.605 | 109559990. | 118515540. | 8.1741 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.484 | 2.45  | 2.518 | 123295106. | 128389860. | 4.1322 |   |



538 of 859

## PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analyti | cal - Gre | en Bayl     | nstrument ID:       | 40GCSK        | _GC Column           | : <u>Col 1</u> | SDG No.: 401   | 57940 |
|------------------------|-----------|-------------|---------------------|---------------|----------------------|----------------|----------------|-------|
| Calibration Date(s):   | 05/03/20  | 05/03       | 3/2018              |               | Calibration Tir      | me(s):         | 10:54          | 18:26 |
| LAB FILE ID            |           |             |                     |               |                      |                |                |       |
| CAL1A = 050318.B\050   | 318057.   | ) CAL       | 1B = 05031          | 8.B\05031802  | 1 D C                | AL1C = 05      | 0318.B\0503180 | 045 D |
| CAL1D = 050318.B\050   |           |             |                     | 8.B\05031800  |                      |                | 0318.B\0503180 |       |
| CAL2B = 050318.B\050   |           |             | -                   | 8.B\050318047 |                      |                | 0318.B\050318( |       |
| CAL2F = 050318.B\050   |           | <del></del> |                     | 8.B\050318061 |                      |                | 0318.B\050318( |       |
| CAL3C = 050318.B\050   |           |             |                     | 8.B\050318037 |                      |                | 0318.B\0503180 |       |
| CAL4A = 050318.B\050   |           |             |                     | 8.B\050318027 |                      |                | 0318.B\050318( |       |
| CAL4D = 050318.B\050   |           |             |                     | 8.B\050318015 |                      |                | 0318.B\0503180 |       |
| CAL5B = 050318.B\050   |           |             |                     | 8.B\050318053 |                      |                | 0318.B\050318( |       |
| CAL5F = 050318.B\050   | 318017.E  | )           |                     |               |                      | _              |                |       |
| COMPOUND               | PEAK      | CURVE TYPE  | CAL1                | CAL2          | CAL3                 | CAL4           | CAL5           |       |
| Aroclor 1016           | 1         | Averaged    | 3226830.00          | 3214890.00    | 3099390.00           | 2936223.75     | 2816368.00     |       |
| Aroclor 1016           | 2         | Averaged    | 3426870.00          | 3282010.00    | 3196364.00           | 3025390.00     | 2923969.00     |       |
| Aroclor 1016           | 3         | Averaged    | 9792050.00          | 9801085.00    | 9416772.00           | 9088905.00     | 8886004.00     | 1     |
| Aroclor 1016           | 4         | Averaged    | 4283190.00          | 4182570.00    | 4056290.00           | 3840508.75     | 3741518.00     | ]     |
| Aroclor 1016           | 5         | Averaged    | 2846930.00          | 2773990.00    | 2750986.00           | 2588326.25     | 2529476.00     |       |
| Aroclor 1221           | 1         | Averaged    | 1072930.00          | 1056575.00    | 963810.000           | 945701.250     | 912984.000     |       |
| Aroclor 1221           | 2         | Averaged    | 609940.000          | 541470.000 v  | 512828.000           | 492945.000     | 478736.000     | ]     |
| Aroclor 1221           | 3         | Averaged    | 1451360.00          | 1429315.00    | 1349672.00 <b>v</b>  | 1372628.75     | 1331974.00     |       |
| Aroclor 1221           | 4         | Averaged    | 1127220.00          | 1143945.00    | 1067226.00           | 1087150.00     | 1092035.00     |       |
| Aroclor 1221           | 5         | Averaged    | 3524300.00          | 3517660.00    | 3282850.00           | 3232473.75     | 3158162.00     |       |
| Aroclor 1242           | 1         | Averaged    | 2713170.00          | 2557185.00    | 2374006.00           | 2234975.00     | 2222470.00     |       |
| Aroclor 1242           | 2         | Averaged    | 2798950.00          | 2528770.00    | 2413564.00           | 2291745.00     | 2273072.00     |       |
| Aroclor 1242           | 3         | Averaged    | 7951690.00          | 7634755.00    | 7053656.00           | 6807721.25     | 6829835.00     |       |
| Aroclor 1242           | 4         | Averaged    | 3482340.00          | 3295345.00    | 3030816.00           | 2902472.50     | 2870213.00     |       |
| Aroclor 1242           | 5         | Averaged    | 2436090.00          | 2121480.00    | 2023398.00           | 1945076.25     | 1940441.00     |       |
| Aroclor 1248           | 1         | Averaged    | 2456240.00          | 2537550.00    | 2411430.00           | 2248226.25     | 2273295.00     |       |
| Aroclor 1248           | 2         | Averaged    | 4291080.00          | 4562680.00    | 4325300.00           | 1              | 4071185.00     |       |
| Aroclor 1248           | 3         | Averaged    | 1996230.00          | 2105285.00    | 2090798.00           |                | 2018218.00     |       |
| Aroclor 1248           | 4         | Averaged    | 5642540.00          | 5832570.00    |                      | 5151295.00     | 5236055.00     |       |
| Aroclor 1248           | 5         | Averaged    | 3753500.00 🗸        | 3954320.00    | 3845468.00           | 3636438.75     | 3726636.00     |       |
| Aroclor 1254           | 1         | Averaged    | 6052220.00          | 6024570.00    | 5641990.00           | 5331835.00     | 5147482.00     |       |
| Aroclor 1254           | 2         | Averaged    | 4837540.00          | 4873840.00    | 4718368.00           | 4503321.25     | 4385746.00     | _     |
| Aroclor 1254           | 3         | Averaged    | 9088090.00          | 9067030.00    | 8515712.00           | 8188597.50     | 7950560.00     |       |
| Aroclor 1254           | 4         | Averaged    | 5250130.00 <b>v</b> |               | /5430814.00 <b>v</b> |                |                |       |
| Aroclor 1254           | 5         | Averaged    | 7569040.00          | 7663545.00    | 7379306.00           | 7075227.50     | 6918346.00     |       |
| Aroclor 1260           | 1         | Averaged    | 10453040.0          | 10301025.0    | 10038194.0           | 9713460.00     | 9544191.00     | /     |
| Aroclor 1260           | 2         | Averaged    | 12183150.0          | 12067250.0    | /11801074.0 <b>(</b> | /11484917.5    |                |       |
| Aroclor 1260           | 3         | Averaged    | 5691220.00          | 5822245.00    | 5709174.00           | 5574191.25     | 5484640.00     |       |
| Aroclor 1260           | 4         | Averaged    | 3569510.00          | 3576420.00    | 3443486.00           | 3276160.00     | 3228577.00     | J     |

### PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analytical - Green Bay Instrument ID: 40GCSK GC Column: Col 1 SDG No.: 40157940 |               |          |            |                  |                      |                |           |                           |       |
|--|---------------|----------|------------|------------------|----------------------|----------------|-----------|---------------------------|-------|
| Calibration  | Date(s):0     | 5/03/20  | 1805/03    | 3/2018           |                      | Calibration Ti | me(s):    | 10:54                     | 18:26 |
| LAB FILE   | ID            |          |            |                  |                      |                |           |                           |       |
| CAL1A =  | 050318.B\0503 | 318057.D | CAL        | 1B = <u>0503</u> | 18.B\05031802        | 1.D C          | AL1C =    | 050318.B\0503180          | 45.D  |
| CAL1D =  | 050318.B\0503 | 318033.D | CAL        | 1F = <u>0503</u> | 18.B\05031800        | 9.D C          | AL2A =    | 050318.B\0503180          | 59.D  |
| CAL2B =  | 050318.B\0503 | 318023.D | CAL        | 2C = <u>0503</u> | 18.B\05031804        | 7.D C          | AL2D = 9  | 050318.B\0503180          | 35.D  |
| CAL2F =  | 050318.B\0503 | 318011.D | CAL        | 3A = <u>0503</u> | 18.B\05031806        | 1.D C          | AL3B =    | 050318.B\0503180          | 25.D  |
| CAL3C =  | 050318.B\0503 | 318049.D | CAL        | 3D = <u>0503</u> | 050318.B\050318037.D |                | AL3F = (  | 050318.B\0503180          | 13.D  |
| CAL4A =  | 050318.B\0503 | 318063.D | CAL-       | 4B = <u>0503</u> | 18.B\05031802        | 7.D C          | AL4C =    | 050318.B\0503180          | 51.D  |
| CAL4D =  | 050318.B\0503 | 318039.D | CAL        | 4F = <u>0503</u> | 18.B\05031801        | 5.D C          | AL5A = 0  | 050318.B\0503 <u>1</u> 80 | 65.D  |
| CAL5B =  | 050318.B\0503 | 318029.D | CAL        | 5C = <u>0503</u> | 18.B\05031805        | 3.D C          | AL5D = (  | 050318.B\0503180          | 41.D  |
| CAL5F =  | 050318.B\0503 | 318017.D |            |                  |                      |                |           |                           |       |
| COMPOU   | ND            | PEAK     | CURVE TYPE | CAL1             | CAL2                 | CAL3           | CAL4      | CAL5                      |       |
| Aroclor 12   | 60            | 5        | Averaged   | 3302230.00       | 3276995.00           | 3205912.00     | 3056618.7 | 75 2993726.00             |       |
| Decachlor  | obiphenyl (S) |          | Averaged   | 147518500.       | 136951500.           | 132501260.     | 12598489  | 0. 122996913.             |       |
| Tetrachlor   | o-m-xylene    |          | Averaged   | 122740900.       | 118987500.           | 122013680.     | 11955960  | 0. 118904826.             |       |

# PCB - FORM VI SVOA-3 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name: Pace Analytic | cal - Gre | en Bay In  | strument ID:     | 40GCSK       | GC Colu     | mn: Col 1 | SDG I   | No.: <u>4015</u> | 7940  |
|-------------------------|-----------|------------|------------------|--------------|-------------|-----------|---------|------------------|-------|
| Calibration Date(s):    | 05/03/20  | 18 05/03/  | 2018             |              | Calibration | Time(s):  | 10:5    | 4                | 18:26 |
| LAB FILE ID             |           |            |                  |              |             |           |         |                  |       |
| CAL1A = 050318.B\0503   | 318057.D  | CAL1       | B = <u>05031</u> | 8.B\05031802 | 1.D         | CAL1C =   | 050318. | B\0503180        | 45.D  |
| CAL1D = 050318.B\0503   | 318033.D  | ) CAL1     | F = <u>05031</u> | 8.B\05031800 | 9.D         | CAL2A =   | 050318. | B\0503180        | 59.D  |
| CAL2B = 050318.B\0503   | 318023.D  | CAL2       | C = <u>05031</u> | 8.B\05031804 | 7.D         | CAL2D =   | 050318. | B\0503180        | 35.D  |
| CAL2F = 050318.B\0503   | 318011.D  | CAL3       | A = <u>05031</u> | 8.B\05031806 | 1.D         | CAL3B =   | 050318. | B\0503180        | 25.D  |
| CAL3C = 050318.B\0503   | 318049.D  | CAL3       | D = 05031        | 8.B\05031803 | 7.D         | CAL3F =   | 050318. | B\0503180        | 13.D  |
| CAL4A = 050318.B\0503   | 318063.D  | CAL4       | B = 05031        | 8.B\05031802 | 7.D         | CAL4C =   | 050318. | B\0503180        | 51.D  |
| CAL4D = 050318.B\0503   | 318039.D  | CAL4       | F = <u>05031</u> | 8.B\05031801 | 5.D         | CAL5A =   | 050318. | B\0503180        | 65.D  |
| CAL5B = 050318.B\0503   | 318029.D  | CAL5       | C = <u>05031</u> | 8.B\05031805 | 3.D         | CAL5D =   | 050318. | B\0503180        | 41.D  |
| CAL5F = 050318.B\0503   | 318017.D  | )          | **               |              |             |           |         |                  |       |
| COMPOUND                | PEAK      | CURVE TYPE | %RSD             | R2           | A1          | A2        |         | A3               |       |
| Aroclor 1016            | 1         | Averaged   | 5.84             |              |             | 305874    | 0.35    |                  |       |
| Aroclor 1016            | 2         | Averaged   | 6.32             |              |             | 317092    | 0.60    |                  |       |
| Aroclor 1016            | 3         | Averaged   | 4.37             |              |             | 939696    | 3.20    |                  |       |
| Aroclor 1016            | 4         | Averaged   | 5.65             |              |             | 402081    | 5.35    |                  |       |
| Aroclor 1016            | 5         | Averaged   | 4.94             |              |             | 269794    | 1.65    |                  |       |
| Aroclor 1221            | 1         | Averaged   | 7.11             |              |             | 990400    | 0.05    |                  |       |
| Aroclor 1221            | 2         | Averaged   | 9.84             |              |             | 527183    | 3.80    |                  |       |
| Aroclor 1221            | 3         | Averaged   | 3.70             |              |             | 138698    | 9.95    |                  |       |
| Aroclor 1221            | 4         | Averaged   | 2.83             |              |             | 110351    | 5.20    |                  |       |
| Aroclor 1221            | 5         | Averaged   | 5.03             |              |             | 334308    | 9.15    |                  |       |
| Aroclor 1242            | 1         | Averaged   | 8.76             |              |             | 242036    | 1.20    |                  |       |
| Aroclor 1242            | 2         | Averaged   | 8.73             |              |             | 246122    | 0.20    |                  |       |
| Aroclor 1242            | 3         | Averaged   | 7.06             |              |             | 725553    | 1.45    |                  |       |
| Aroclor 1242            | 4         | Averaged   | 8.48             |              |             | 311623    | 7.30    |                  |       |
| Aroclor 1242            | 5         | Averaged   | 9.80             |              |             | 209329    | 7.05    |                  |       |
| Aroclor 1248            | 1         | Averaged   | 5.14             |              |             | 238534    | 8.25    |                  |       |
| Aroclor 1248            | 2         | Averaged   | 5.34             |              |             | 424744    | 0.25    | BER GOOD BLOCK   |       |
| Aroclor 1248            | 3         | Averaged   | 2.84             |              |             | 203703    | 9.95    |                  |       |
| Aroclor 1248            | 4         | Averaged   | 5.16             |              |             | 547739    | 3.60    |                  |       |
| Aroclor 1248            | 5         | Averaged   | 3.20             |              |             | 378327    | 2.55    |                  |       |
| Aroclor 1254            | 1         | Averaged   | 7.17             |              |             | 563961    | 9.40    |                  |       |
| Aroclor 1254            | 2         | Averaged   | 4.55             |              |             | 466376    | 3.05    |                  |       |
| Aroclor 1254            | 3         | Averaged   | 5.97             |              |             | 856199    | 7.90    |                  |       |
| Aroclor 1254            | 4         | Averaged   | 2.99             |              |             | 531287    | 4.15    |                  |       |
| Aroclor 1254            | 5         | Averaged   | 4.34             |              |             | 732109    | 2.90    |                  |       |
| Aroclor 1260            | 1         | Averaged   | 3.82             | /            |             | 1000998   | 32.00   |                  |       |
| Aroclor 1260            | 2         | Averaged   | 3.15             |              |             | 1176927   | 78.70   |                  |       |
| Aroclor 1260            | 3         | Averaged   | 2.30             |              |             | 565629    |         |                  |       |
| Aroclor 1260            | 4         | Averaged   | 4.73             |              |             | 341883    | 0.60    |                  |       |

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

245 of 859

# PCB - FORM VI SVOA-4 PCB INITIAL CALIBRATION (MULTIPOINT)

| Lab Name    | : Pace Analytic                | al - Gre | en Bay   | _ Instrum | ent ID: | 40GCSK       | GC Colu     | mn: Col 1 | SI    | DG No.: 401   | 57940 |
|-------------|--------------------------------|----------|----------|-----------|---------|--------------|-------------|-----------|-------|---------------|-------|
| Calibration | n Date(s):(                    | 5/03/20  | 18 05    | 03/2018   |         |              | Calibration | Time(s):  |       | 10:54         | 18:26 |
| LAB FILE    | ID                             |          |          |           |         |              |             |           |       |               |       |
| CAL1A =     | 050318.B\0503                  | 318057.E | ) C.     | AL1B =    | 05031   | 8.B\05031802 | 21.D        | CAL1C =   | 0503  | 318.B\0503180 | 45.D  |
| CAL1D =     | 050318.B\0503                  | 318033.E | ) C.     | 4L1F =    | 05031   | 8.B\05031800 | 9.D         | CAL2A =   | 0503  | 318.B\0503180 | 59.D  |
| CAL2B =     | 050318.B\0503                  | 318023.E | ) C.     | AL2C =    | 05031   | 8.B\05031804 | 7.D         | CAL2D =   | 0503  | 318.B\0503180 | 35.D  |
| CAL2F =     | 050318.B\0503                  | 318011.  | ) C.     | AL3A =    | 05031   | 8.B\05031806 | 61.D        | CAL3B =   | 0503  | 318.B\0503180 | 25.D  |
| CAL3C =     | 050318.B\0503                  | 318049.  | ) C.     | 4L3D =    | 05031   | 8.B\05031803 | 37.D        | CAL3F =   | 0503  | 318.B\0503180 | 13.D  |
| CAL4A =     | 050318.B\0503                  | 318063.E | ) C.     | 4L4B =    | 05031   | 8.B\05031802 | .7.D        | CAL4C =   | 0503  | 318.B\0503180 | 51.D  |
| CAL4D =     | 050318.B\0503                  | 318039.E | ) C.     | 4L4F =    | 05031   | 8.B\05031801 | 5.D         | CAL5A =   | 0503  | 318.B\0503180 | 65.D  |
| CAL5B =     | 050318.B\0503                  | 318029.E | ) C      | AL5C =    | 05031   | 8.B\05031805 | 3.D         | CAL5D =   | 0503  | 318.B\0503180 | 41.D  |
| CAL5F =     | 050318.B\0503                  | 318017.E | )        |           |         |              |             |           |       |               | ı     |
| СОМРОИ      | ND                             | PEAK     | CURVE TY | PE %F     | RSD     | R2           | A1          | A2        |       | А3            |       |
| Aroclor 12  | 260                            | 5        | Averaged | 4         | .29     |              |             | 316709    | 6.35  |               | •     |
| Decachlor   | Decachlorobiphenyl (S) Average |          | Averaged | ed 7.27   |         |              |             | 133190    | 612.6 | 271224        |       |
| Tetrachlor  | o-m-xylene                     |          | Averaged | 1         | .49     |              |             | 120441    | 301.3 |               |       |



# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name: Pace Analyti | cal - Gree | en Bay | _ Instrume | ent ID: 40G0         | CSKG              | C Column:    | Col 1                   | _SDG No.: 4          | 10157940 |
|------------------------|------------|--------|------------|----------------------|-------------------|--------------|-------------------------|----------------------|----------|
| Calibration Date(s):   | 05/03/20   | 18 05/ | 03/2018    |                      | Calil             | bration Time | e(s):                   | 10:54                | 18:26    |
| LAB FILE ID            |            |        |            |                      |                   |              |                         |                      |          |
| CAL1A = 050318.B\050   | 318057.D   | C      | AL1B =     | 050318.B\050         | 0318021.D         | CAL          | CAL1C = 050318.B\050318 |                      |          |
| CAL1D = 050318.B\050   | 318033.D   | C,     | AL1F =     | 050318.B\050318009.D |                   |              |                         | 050318.B\050318059.D |          |
| CAL2B = 050318.B\050   | 318023.D   |        | AL2C =     | 050318.B\050         |                   | CAL          | _                       | 050318.B\0503        |          |
| CAL2F = 050318.B\050   | 318011.D   |        | AL3A =     | 050318.B\050         |                   | CAL          | _                       | 050318.B\0503        |          |
| CAL3C = 050318.B\050   | 318049.D   |        | AL3D =     | 050318.B\050         |                   | CAL          | _                       | 050318.B\0503        |          |
| CAL4A = 050318.B\050   | 318063.D   |        | AL4B =     | 050318.B\050         |                   | CAL          | _                       | 050318.B\0503        |          |
| CAL4D = 050318.B\050   |            |        | AL4F =     | 050318.B\050         |                   | CAL          | _                       | 050318.B\0503        |          |
| CAL5B = 050318.B\050   |            |        | AL5C =     | 050318.B\050         |                   | CAL          | _                       | 050318.B\0503        |          |
| CAL5F = 050318.B\050   |            |        | .200       | 000010.5100          | , o , o o o o . B | 0712         |                         | 300010.2.0000        | 10011.5  |
|                        |            |        |            |                      |                   |              |                         | RT W                 | INDOW    |
| COMPOUND               | PEAK       | CAL1   | CAL2       | CAL3                 | CAL4              | CAL5         | RT                      | FROM                 | TO       |
| Aroclor 1016           | 1          | 3.396  | 3.395      | 3.394                | 3.395             | 3.395        | 3.395                   | 3.361                | 3.429    |
| Aroclor 1016           | 2          | 3.592  | 3.592      | 3.593                | 3.593             | 3.593        | 3.592                   | 3.558                | 3.626    |
| Aroclor 1016           | 3          | 3.91   | 3.909      | 3.908                | 3.908             | 3.908        | 3.909                   | 3.875                | 3.943    |
| Aroclor 1016           | 4          | 4.012  | 4.012      | 4.012                | 4.011             | 4.011        | 4.011                   | 3.977                | 4.045    |
| Aroclor 1016           | 5          | 4.079  | 4.077      | 4.077                | 4.077             | 4.078        | 4.078                   | 4.044                | 4.112    |
| Aroclor 1221           | 1          | 1.854  | 1.854      | 1.854                | 1.853             | 1.853        | 1.853                   | 1.819                | 1.887    |
| Aroclor 1221           | 2          | 2.472  | 2.473      | 2.471                | 2.471             | 2.471        | 2.471                   | 2.437                | 2.505    |
| Aroclor 1221           | 3          | 2.759  | 2.759      | 2.758                | 2.758             | 2.758        | 2.758                   | 2.724                | 2.792    |
| Aroclor 1221           | 4          | 2.861  | 2.861      | 2.861                | 2.86              | 2.86         | 2.86                    | 2.826                | 2.894    |
| Aroclor 1221           | 5          | 2.924  | 2.924      | 2.924                | 2.923             | 2.924        | 2.923                   | 2.889                | 2.957    |
| Aroclor 1242           | 1          | 3.395  | 3.395      | 3.395                | 3.395             | 3.395        | 3.396                   | 3.362                | 3.43     |
| Aroclor 1242           | 2          | 3.593  | 3.593      | 3.593                | 3.593             | 3.593        | 3.592                   | 3.558                | 3.626    |
| Aroclor 1242           | 3          | 3.908  | 3.909      | 3.908                | 3.908             | 3.908        | 3.909                   | 3.875                | 3.943    |
| Aroclor 1242           | 4          | 4.012  | 4.012      | 4.012                | 4.011             | 4.011        | 4.011                   | 3.977                | 4.045    |
| Aroclor 1242           | 5          | 4.078  | 4.079      | 4.077                | 4.077             | 4.077        | 4.078                   | 4.044                | 4.112    |
| Aroclor 1248           | 1          | 4.344  | 4.344      | 4.344                | 4.343             | 4.344        | 4.343                   | 4.309                | 4.377    |
| Aroclor 1248           | 2          | 4.63   | 4.63       | 4.631                | 4.63              | 4.63         | 4.63                    | 4.596                | 4.664    |
| Aroclor 1248           | 3          | 4.898  | 4.899      | 4.898                | 4.898             | 4.897        | 4.898                   | 4.864                | 4.932    |
| Aroclor 1248           | 4          | 4.964  | 4.964      | 4.964                | 4.964             | 4.963        | 4.963                   | 4.929                | 4.997    |
| Aroclor 1248           | 5          | 5.124  | 5.124      | 5.123                | 5.123             | 5.123        | 5.123                   | 5.089                | 5.157    |
| Aroclor 1254           | 1          | 5.248  | 5.247      | 5.247                | 5.247             | 5.247        | 5.248                   | 5.214                | 5.282    |
| Aroclor 1254           | 2          | 5.493  | 5.494      | 5.493                | 5.493             | 5.493        | 5.492                   | 5.458                | 5.526    |
| Aroclor 1254           | 3          | 5.596  | 5.595      | 5.596                | 5.596             | 5.595        | 5.596                   | 5.562                | 5.63     |
| Aroclor 1254           | 4          | 6.114  | 6.115      | 6.114                | 6.113             | 6.114        | 6.113                   | 6.079                | 6.147    |
| Aroclor 1254           | 5          | 6.386  | 6.386      | 6.385                | 6.386             | 6.386        | 6.387                   | 6.353                | 6.421    |
| Aroclor 1260           | 1          | 6.387  | 6.386      | 6.386                | 6.387             | 6.386        | 6.387                   | 6.353                | 6.421    |
| Aroclor 1260           | 2          | 7.09   | 7.09       | 7.09                 | 7.091             | 7.09         | 7.09                    | 7.056                | 7.124    |
| Aroclor 1260           | 3          | 7.338  | 7.338      | 7.338                | 7.338             | 7.338        | 7.338                   | 7.304                | 7.372    |

# PCB - FORM VI SVOA-2 PCB INITIAL CALIBRATION RETENTION TIME (MULTIPOINT)

| Lab Name:     | Pace Analytic | al - Gree | en Bay | Instrum    | ent ID: 40G | CSKG      | Column      | Col 1  | SDG No.:      | 40157940 |
|---------------|---------------|-----------|--------|------------|-------------|-----------|-------------|--------|---------------|----------|
| Calibration D | Date(s):0     | 5/03/20   | 18(    | 05/03/2018 |             | Calib     | oration Tir | ne(s): | 10:54         | 18:26    |
| LAB FILE ID   |               |           |        |            |             |           |             |        |               |          |
| CAL1A =       | 050318.B\0503 | 318057.D  |        | CAL1B =    | 050318.B\05 | 0318021.D | CA          | AL1C = | 050318.B\0503 | 318045.D |
| CAL1D =       | 050318.B\0503 | 318033.D  |        | CAL1F =    | 050318.B\05 | 0318009.D | CA          | AL2A = | 050318.B\0503 | 318059.D |
| CAL2B =       | 050318.B\0503 | 318023.D  |        | CAL2C =    | 050318.B\05 | 0318047.D | CA          | AL2D = | 050318.B\0503 | 318035.D |
| CAL2F =       | 050318.B\0503 | 318011.D  |        | CAL3A =    | 050318.B\05 | 0318061.D | CA          | AL3B = | 050318.B\0503 | 318025.D |
| CAL3C =       | 050318.B\0503 | 318049.D  |        | CAL3D =    | 050318.B\05 | 0318037.D | CA          | \L3F = | 050318.B\0503 | 318013.D |
| CAL4A =       | 050318.B\0503 | 318063.D  |        | CAL4B =    | 050318.B\05 | 0318027.D | CA          | AL4C = | 050318.B\0503 | 318051.D |
| CAL4D =       | 050318.B\0503 | 318039.D  |        | CAL4F =    | 050318.B\05 | 0318015.D | CA          | NL5A = | 050318.B\0503 | 318065.D |
| CAL5B =       | 050318.B\0503 | 318029.D  |        | CAL5C =    | 050318.B\05 | 0318053.D | CA          | \L5D = | 050318.B\0503 | 318041.D |
| CAL5F =       | 050318.B\0503 | 318017.D  |        |            |             |           |             |        |               |          |
| COME          | OLIND         | DEAK      | CALA   | 0410       | 0410        | 0.41.4    | 041.5       | БТ     | RT W          | INDOW    |
| COIVIP        | OUND          | PEAK      | CAL1   | CAL2       | CAL3        | CAL4      | CAL5        | RT     | FROM          | ТО       |
| Aroclor 1260  | )             | 4         | 7.529  | 7.528      | 7.529       | 7.528     | 7.528       | 7.52   | 9 7.495       | 7.563    |
| Aroclor 1260  | )             | 5         | 7.987  | 7.986      | 7.986       | 7.986     | 7.986       | 7.98   | 7 7.953       | 8.021    |
| Decachlorob   | oiphenyl (S)  |           | 8.657  | 8.656      | 8.657       | 8.658     | 8.657       | 8.65   | 7 8.623       | 8.691    |
| Tetrachloro-  | m-xylene      |           | 2.549  | 2.548      | 2.549       | 2.549     | 2.549       | 2.54   | 9 2.515       | 2.583    |

# PCB - FORM VI SVOA-1 PCB INITIAL CALIBRATION DATA (SINGLE POINT)

| Lab Name: Pace Analytical - Green Bay | Instrument ID: 40G | CSK GC Column: Col 1 | SDG No.: 40157940 |  |
|---------------------------------------|--------------------|----------------------|-------------------|--|
| Calibration Date(s):05/03/2018        |                    | Calibration Time(s): | 10:38             |  |
| LAB FILE ID                           |                    |                      |                   |  |
| CAL3S = <u>050318.B\050318007.D</u>   |                    |                      |                   |  |

| COMPOUND     | AMOUNT | DEAK | DT    | RT WII | NDOW  | RESPONSE   |
|--------------|--------|------|-------|--------|-------|------------|
| COMPOUND     | AMOUNT | PEAK | RT    | FROM   | ТО    | FACTOR     |
| Aroclor 1232 | .5     | 1    | 2.923 | 2.888  | 2.956 | 2694578.00 |
| Aroclor 1232 | .5     | 2    | 3.592 | 3.558  | 3.626 | 1418110.00 |
| Aroclor 1232 | .5     | 3    | 3.908 | 3.874  | 3.942 | 4136332.00 |
| Aroclor 1232 | .5     | 4    | 4.011 | 3.977  | 4.045 | 1788600.00 |
| Aroclor 1232 | .5     | 5    | 4.077 | 4.044  | 4.112 | 1171600.00 |

|                   | Document Name:               | Document Revised:             |  |
|-------------------|------------------------------|-------------------------------|--|
| Pace Analytical"  | PCB Calibration Low Standard | 23-Apr-2018                   |  |
| 1 doos transtious | Document No.:                | Issuing Authority:            |  |
|                   | F-GB-O-155-Rev.00            | Pace Green Bay Quality Office |  |

### **PCB Low Level Calibration % Difference Check**

Lab Name: Pace Analytical - Green Bay
Instrument ID: 40GCSK
Calibration Date: 5/3/2018

|             |            | Abundance     |              | Acceptance | ,         |
|-------------|------------|---------------|--------------|------------|-----------|
| Aroclor     | True Value | Concentration | % Difference | Criteria % | Pass/Fail |
| AR1221-CAL1 | .1         | 0.107248      | 7.248        | 20         | Pass      |
| AR1242-CAL1 | .1         | 0.112708      | 12.708       | 20         | Pass      |
| AR1248-CAL1 | .1         | 0.100845      | 0.845        | 20         | Pass      |
| AR1254-CAL1 | 499 .1     | 0.103878      | 3.878        | 20         | Pass      |
| AR1016-CAL1 |            | 0.105964      | 5.964        | 20         | Pass      |
| AR1260-CAL1 | .1         | 0.103447      | 3.447        | 20         | Pass      |



40157940 525 of 859

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10965753ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 05/03/2018 Time: 18:58

Instrument ID: 40GCSK GC Column: Col 1 Init. Calib. Date(s): 05/03/2018

5/03/2018 05/03/2018

Lab File ID: 050318.B\050318069.D Init. Calib. Time(s): 10:38 18:26

SDG No.: 40157940

| <del></del>            |      |          |       |       |       |            |            |         |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | PEAK | CURVE    | рт    | RT WI | NDOW  | RRF or     | RRF or     | %D      |   |
| COMPOUND               | PEAR | CORVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |   |
| Aroclor 1221           | 1    | Averaged | 1.852 | 1.819 | 1.887 | 990400.050 | 1007748.00 | 1.7516  | v |
| Aroclor 1221           | 2    | Averaged | 2.472 | 2.437 | 2.505 | 527183.800 | 525090.000 | -0.3972 | J |
| Aroclor 1221           | 3    | Averaged | 2.757 | 2.724 | 2.792 | 1386989.95 | 1434412.00 | 3.4191  | J |
| Aroclor 1221           | 4    | Averaged | 2.861 | 2.826 | 2.894 | 1103515.20 | 1105148.00 | 0.1480  | J |
| Aroclor 1221           | 5    | Averaged | 2.924 | 2.889 | 2.957 | 3343089.15 | 3473996.00 | 3.9157  | J |
| Decachlorobiphenyl (S) |      | Averaged | 8.658 | 8.623 | 8.691 | 133190612. | 126277860. | -5.1901 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.549 | 2.515 | 2.583 | 120441301. | 114744400. | -4.7300 |   |
|                        |      |          |       |       |       |            |            |         |   |



## PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10965769ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 05/03/2018 Time: 19:14

SDG No.: 40157940

| DEAK | CLIDVE   | DT  | RT WI  | NDOW  | RRF or  | RRF or  | %D  |
|------|----------|---|--|---|---|---|---|
| PEAR | CORVE    | KI  | FROM   | ТО  | Amount  | Amount  | 70D   |
| 1    | Averaged | 3.395   | 3.362  | 3.43  | 2420361.20  | 2477562.00  | 2.3633  |
| 2    | Averaged | 3.592   | 3.558  | 3.626   | 2461220.20  | 2532278.00  | 2.8871  |
| 3    | Averaged | 3.908   | 3.875  | 3.943   | 7255531.45  | 7352366.00  | 1.3346  |
| 4    | Averaged | 4.01  | 3.977  | 4.045   | 3116237.30  | 3192204.00  | 2.4378  |
| 5    | Averaged | 4.077   | 4.044  | 4.112   | 2093297.05  | 2136002.00  | 2.0401  |
|      | Averaged | 8.657   | 8.623  | 8.691   | 133190612.  | 120978920.  | -9.1686   |
|      | Averaged | 2.548   | 2.515  | 2.583   | 120441301.  | 109577260.  | -9.0202   |
|      | 3 4      | 1 Averaged 2 Averaged 3 Averaged 4 Averaged 5 Averaged Averaged | 1 Averaged 3.395 2 Averaged 3.592 3 Averaged 3.908 4 Averaged 4.01 5 Averaged 4.077 Averaged 8.657 | PEAK         CURVE         RT         FROM           1         Averaged         3.395         3.362           2         Averaged         3.592         3.558           3         Averaged         3.908         3.875           4         Averaged         4.01         3.977           5         Averaged         4.077         4.044           Averaged         8.657         8.623 | FROM         TO           1         Averaged         3.395         3.362         3.43           2         Averaged         3.592         3.558         3.626           3         Averaged         3.908         3.875         3.943           4         Averaged         4.01         3.977         4.045           5         Averaged         4.077         4.044         4.112           Averaged         8.657         8.623         8.691 | PEAK         CURVE         RT         FROM         TO         Amount           1         Averaged         3.395         3.362         3.43         2420361.20           2         Averaged         3.592         3.558         3.626         2461220.20           3         Averaged         3.908         3.875         3.943         7255531.45           4         Averaged         4.01         3.977         4.045         3116237.30           5         Averaged         4.077         4.044         4.112         2093297.05           Averaged         8.657         8.623         8.691         133190612 | PEAK         CURVE         RT         FROM         TO         Amount         Amount           1         Averaged         3.395         3.362         3.43         2420361.20         2477562.00           2         Averaged         3.592         3.558         3.626         2461220.20         2532278.00           3         Averaged         3.908         3.875         3.943         7255531.45         7352366.00           4         Averaged         4.01         3.977         4.045         3116237.30         3192204.00           5         Averaged         4.077         4.044         4.112         2093297.05         2136002.00           Averaged         8.657         8.623         8.691         133190612         120978920 |



The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

540 of 859

### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

SAMPLE NO.

10965760ICV

05/03/2018

Lab Name: Pace Analytical - Green Bay Calibration Date: <u>05/03/2018</u> Time: <u>19:30</u>

Instrument ID: 40GCSK GC Column: Col 1 Init. Calib. Date(s): 05/03/2018

Lab File ID: 050318.B\050318073.D Init. Calib. Time(s): 10:38 18:26

SDG No.: 40157940

| COMPOUND               | חבאע | CUDVE    | ОТ    | RT WII | NDOW  | RRF or     | RRF or     | 0/15    |   |
|------------------------|------|----------|-------|--------|-------|------------|------------|---------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM   | TO    | Amount     | Amount     | %D      |   |
| Aroclor 1248           | 1    | Averaged | 4.344 | 4.309  | 4.377 | 2385348.25 | 2537884.00 | 6.3947  | 7 |
| Aroclor 1248           | 2    | Averaged | 4.63  | 4.596  | 4.664 | 4247440.25 | 4466132.00 | 5.1488  | 7 |
| Aroclor 1248           | 3    | Averaged | 4.898 | 4.864  | 4.932 | 2037039.95 | 2219262.00 | 8.9454  | - |
| Aroclor 1248           | 4    | Averaged | 4.964 | 4.929  | 4.997 | 5477393.60 | 5820260.00 | 6.2597  | 7 |
| Aroclor 1248           | 5    | Averaged | 5.124 | 5.089  | 5.157 | 3783272.55 | 4083010.00 | 7.9227  | V |
| Decachlorobiphenyl (S) |      | Averaged | 8.657 | 8.623  | 8.691 | 133190612. | 123503360. | -7.2732 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.549 | 2.515  | 2.583 | 120441301. | 114009700. | -5.3400 |   |



### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10965755ICV

Lab Name: Pace Analytical - Green Bay Calibration Date: 05/03/2018 Time: 19:47

Instrument ID: 40GCSK GC Column: Col 1 Init. Calib. Date(s): 05/03/2018 05/03/2018

Lab File ID: 050318.B\050318075.D Init. Calib. Time(s): 10:38 18:26

SDG No.: 40157940

| COMPOUND               | DEAK | CURVE    | DT    | RT WI | NDOW  | RRF or     | RRF or     | %D      |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |
| Aroclor 1254           | 1    | Averaged | 5.247 | 5.214 | 5.282 | 5639619.40 | 5229098.00 | -7.2792 |
| Aroclor 1254           | 2    | Averaged | 5.493 | 5.458 | 5.526 | 4663763.05 | 4346390.00 | -6.8051 |
| Aroclor 1254           | 3    | Averaged | 5.596 | 5.562 | 5.63  | 8561997.90 | 7723550.00 | -9.7927 |
| Aroclor 1254           | 4    | Averaged | 6.115 | 6.079 | 6.147 | 5312874.15 | 4896798.00 | -7.8315 |
| Aroclor 1254           | 5    | Averaged | 6.386 | 6.353 | 6.421 | 7321092.90 | 7028970.00 | -3.9902 |
| Decachlorobiphenyl (S) |      | Averaged | 8.658 | 8.623 | 8.691 | 133190612. | 124092700. | -6.8307 |
| Tetrachloro-m-xylene   |      | Averaged | 2.549 | 2.515 | 2.583 | 120441301. | 114866640. | -4.6285 |



### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10965768ICV

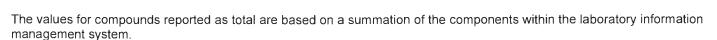
Lab Name: Pace Analytical - Green Bay Calibration Date: 05/03/2018 Time: 20:03

Instrument ID: 40GCSK GC Column: Col 1 Init. Calib. Date(s): 05/03/2018 05/03/2018

Lab File ID: 050318.B\050318077.D Init. Calib. Time(s): 10:38

SDG No.: 40157940

| COMPOUND               | DEAK | CLIDVE   | DT    | RT WI | NDOW  | RRF or     | RRF or     | 0/ D    |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | PEAK | CURVE    | RT    | FROM  | TO    | Amount     | Amount     | %D      |   |
| Aroclor 1016           | 1    | Averaged | 3.394 | 3.361 | 3.429 | 3058740.35 | 3126392.00 | 2.2117  |   |
| Aroclor 1016           | 2    | Averaged | 3.594 | 3.558 | 3.626 | 3170920.60 | 3168508.00 | -0.0761 |   |
| Aroclor 1016           | 3    | Averaged | 3.908 | 3.875 | 3.943 | 9396963.20 | 9468364.00 | 0.7598  |   |
| Aroclor 1016           | 4    | Averaged | 4.011 | 3.977 | 4.045 | 4020815.35 | 4042920.00 | 0.5498  |   |
| Aroclor 1016           | 5    | Averaged | 4.077 | 4.044 | 4.112 | 2697941.65 | 2682334.00 | -0.5785 |   |
| Aroclor 1260           | 1    | Averaged | 6.386 | 6.353 | 6.421 | 10009982.0 | 9413384.00 | -5.9600 | 7 |
| Aroclor 1260           | 2    | Averaged | 7.09  | 7.056 | 7.124 | 11769278.7 | 11929928.0 | 1.3650  | 7 |
| Aroclor 1260           | 3    | Averaged | 7.337 | 7.304 | 7.372 | 5656294.05 | 5762990.00 | 1.8863  | J |
| Aroclor 1260           | 4    | Averaged | 7.528 | 7.495 | 7.563 | 3418830.60 | 3409380.00 | -0.2764 | 7 |
| Aroclor 1260           | 5    | Averaged | 7.986 | 7.953 | 8.021 | 3167096.35 | 3374502.00 | 6.5488  | 7 |
| Decachlorobiphenyl (S) |      | Averaged | 8.656 | 8.623 | 8.691 | 133190612. | 125009800. | -6.1422 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.549 | 2.515 | 2.583 | 120441301. | 112020020. | -6.9920 |   |



### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10983415CCV

Lab Name: Pace Analytical - Green Bay \_\_\_\_\_ Calibration Date: 05/07/2018 \_\_Time: 14:06

 Instrument ID:
 40GCSK
 GC Column:
 Col 1
 Init. Calib. Date(s):
 05/03/2018
 05/03/2018

 Lab File ID:
 050718.B\050718004.D
 Init. Calib. Time(s):
 10:38
 18:26

SDG No.: 40157940

| COMPOUND               | חבי אול | CLIDVE   | DT    | RT WI | NDOW  | RRF or     | RRF or     | %D       |  |
|------------------------|---------|----------|-------|-------|-------|------------|------------|----------|--|
| COMPOUND               | PËAK    | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | 700      |  |
| Aroclor 1248           | 1       | Averaged | 4.344 | 4.309 | 4.377 | 2385348.25 | 2408228.00 | 0.9592   |  |
| Aroclor 1248           | 2       | Averaged | 4.63  | 4.596 | 4.664 | 4247440.25 | 4179566.00 | -1.5980  |  |
| Aroclor 1248           | 3       | Averaged | 4.897 | 4.864 | 4.932 | 2037039.95 | 2085936.00 | 2.4003   |  |
| Aroclor 1248           | 4       | Averaged | 4.964 | 4.929 | 4.997 | 5477393.60 | 5358524.00 | -2.1702  |  |
| Aroclor 1248           | 5       | Averaged | 5.123 | 5.089 | 5.157 | 3783272.55 | 3774028.00 | -0.2444  |  |
| Decachlorobiphenyl (S) |         | Averaged | 8.656 | 8.623 | 8.691 | 133190612. | 119784660. | -10.0652 |  |
| Tetrachloro-m-xylene   |         | Averaged | 2.55  | 2.515 | 2.583 | 120441301. | 112451580. | -6.6337  |  |



#### PCB - FORM VII SVOA-1 PCB CALIBRATION VERIFICATION SUMMARY

10983581CCV

Lab Name: Pace Analytical - Green Bay Calibration Date: <u>05/07/2018</u> Time: <u>17:17</u>

Instrument ID: 40GCSK GC Column: Col 1 Init. Calib. Date(s): 05/03/2018 05/03/2018

Lab File ID: 050718.B\050718016.D Init. Calib. Time(s): 10:38 18:26

SDG No.: 40157940

| COMPOUND               | PEAK | CURVE    | рт    | RT WI | NDOW  | RRF or     | RRF or     | %D      |   |
|------------------------|------|----------|-------|-------|-------|------------|------------|---------|---|
| COMPOUND               | PEAR | CURVE    | RT    | FROM  | ТО    | Amount     | Amount     | %D      |   |
| Aroclor 1254           | 1    | Averaged | 5.247 | 5.214 | 5.282 | 5639619.40 | 5407266.00 | -4.1200 | V |
| Aroclor 1254           | 2    | Averaged | 5.493 | 5.458 | 5.526 | 4663763.05 | 4515790.00 | -3.1728 |   |
| Aroclor 1254           | 3    | Averaged | 5.595 | 5.562 | 5.63  | 8561997.90 | 8136290.00 | -4.9721 | Ç |
| Aroclor 1254           | 4    | Averaged | 6.113 | 6.079 | 6.147 | 5312874.15 | 5292702.00 | -0.3797 | • |
| Aroclor 1254           | 5    | Averaged | 6.385 | 6.353 | 6.421 | 7321092.90 | 7046954.00 | -3.7445 | E |
| Decachlorobiphenyl (S) |      | Averaged | 8.657 | 8.623 | 8.691 | 133190612. | 122835240. | -7.7749 |   |
| Tetrachloro-m-xylene   |      | Averaged | 2.549 | 2.515 | 2.583 | 120441301. | 114613060. | -4.8391 |   |



| Г        |              | T  |       |                              |              |                    |              |                   |                  |                |        |          |                       |   |              |                 |
|----------|--------------|--|-------|------------------------------|--------------|--------------------|--------------|-------------------|------------------|----------------|--------|----------|-----------------------|---|--------------|-----------------|
|          |              | -  |       | equence Name                 | . C+\msdc    | hem\1\:            | sequen       | ce\0306           | 18.s             |                |        |          | societies             |   |              | H               |
|          |              |  | 2     | Comment                      | :            |                    |              | ,                 |                  |                |        |          | wronn                 |   |              |                 |
|          |              |  |       | Operator:<br>Data Path:      |              | HEM\1\I            | DATA\0       | 30618\            |                  |                | IC     | AL       |                       |   |              |                 |
| <u> </u> |              | <del> </del>                                     |       | rument Contro                |              | eq Cmd             |              |                   |                  |                | 4      |          | A-Weller              |   |              |                 |
|          |              |  |       | Analysis                     |              | _                  |              |                   |                  | ,              |        |          |                       |   |              |                 |
|          |              |  |       | rument Contro<br>Analysis    |              | leq Cmd<br>leq Cmd |              |                   |                  |                |        |          |                       |   |              |                 |
|          |              |  |       | -                            |              | -                  |              | nce Bar           | anda O           | ntions         |        |          |                       |   |              |                 |
| -        |              | -  |       | Method Section (X) Full Meth |              | ın                 | (X) O        | n Misma           | tch, I           | nject i        | Anyway |          | w-math                |   |              |                 |
|          |              |  |       | ( ) Reprocess                | sing Only    | ,                  | ( ) O        | n Misma<br>arcode | tch, D<br>Disabl | on't I)<br>.ed | nject  |          |                       |   |              | ļ               |
|          |              |  | ***   |                              |              |                    |              |                   |                  |                |        |          | A 600 AND AND AND AND |   |              |                 |
| <u> </u> |              | -  |       | ine<br>Unlinked              |              | Sample             | Name/:       | Misc In           | 10               |                |        |          |                       |   |              |                 |
| ļ        |              |  | 2)    | RearSamp<br>Datafile         | 1 pri        | me<br>618001       |              |                   |                  |                |        |          |                       | _                                       |              | $\vdash$        |
|          |              |  |       | Method                       | GEE          | IOTA20             | 17           |                   |                  |                |        |          | معددين.               |   |              |                 |
|          |              | İ  | 3)    | Sample<br>Datafile           | 2 pri<br>030 | me<br>618002       |              |                   |                  |                |        |          |                       |   |              |                 |
|          | -            |  |       | Method                       | GEE          | IOTA201            | 17           | ٠                 |                  |                |        |          |                       | +                                       |              |                 |
|          |              |  | 4)    | RearSamp<br>Datafile         |              | 618003             |              |                   |                  |                |        |          |                       |   |              |                 |
| _        |              | -  | E. \  | Method<br>Sample             | GEE<br>4 HEX | IOTA201            | 17           |                   |                  |                |        |          |                       | *************************************** |              |                 |
| -        | -            | <del> </del>                                     | ٧,    | Datafile                     | 030          | 618004             |              |                   |                  |                |        |          |                       |   |              |                 |
| ļ        | ļ            | ļ  | 6)    | Method<br>RearSamp           |              | IOTAZO:            |              | 39:1,17           | 499, NS          | A              |        |          | *******               | +                                       |              | $\vdash$        |
|          |              | -  |       | Datafile<br>Method           | 030          | 618005<br>IOTA201  |              |                   |                  |                |        |          |                       |   |              | ļ <b>I</b>      |
|          |              |  | °7)   | Sample                       | 4 HEX        | ANE                | . ,          |                   |                  |                |        |          |                       | 0000                                    |              |                 |
|          |              |  |       | Datafile<br>Method           | GEE          | 618006<br>IOTA20:  | 17           |                   |                  |                |        |          |                       |   |              |                 |
|          |              |  | 8:)   | RearSamp<br>Datafile         |              | 1-CAL11<br>618007  | F,1881       | 38:1,17           | 499, NS          | A              |        |          | 46/907                | _                                       |              |                 |
|          |              |  |       | Method                       | GEE          | IOTA201            |              | 22 2 22           | 400 NO           | 170            |        |          |                       |   |              |                 |
| <b></b>  |              |  | 9)    | Sample<br>Datafile           |              | 2-CAL38<br>618008  | 5,1855       | 39:1,17           | 498,NS           | A              |        |          |                       |   |              |                 |
|          |              | ļ  | 3.0.) | Method                       | GEB          | IOTA20             |              | 30.1 17           | 499 NS           | : A            |        |          | Section               |   |              |                 |
|          |              |  | 10)   | RearSamp<br>Datafile         | 030          | 618009             |              | 39:1,17           | 455,145          |                |        |          |                       |   |              |                 |
|          |              |  | 11)   | Method<br>Sample             |              | IOTA20             |              | 38:1,17           | 498.NS           | A              |        |          |                       |   |              |                 |
|          | -            |  | 11/   | Datafile                     | 030          | 618010             |              | , .               |                  |                |        |          |                       |   |              |                 |
| ļ        |              |  | 12)   | Méthod<br>RearSamp           |              | IOTA201<br>1-CAL31 |              | 38:1,17           | 499,NS           | A              |        |          | ***                   |   |              | -               |
|          |              |  |       | Datafile<br>Method           |              | 618011<br>IOTA20   | 17           |                   |                  |                |        |          |                       |   |              |                 |
|          |              |  | 1.3)  | Sample                       | 7 122        | 1-CAL2             |              | 39:1,17           | 498,NS           | A              |        |          |                       |   |              |                 |
|          | -            |  |       | Datafile<br>Method           | GEE          | 618012<br>IOTA201  | 17           |                   |                  |                |        |          | ***                   |   |              |                 |
|          |              |  | 14)   | RearSamp                     |              | 1-CAL41<br>618013  | F,1881       | 40:1,17           | 499,NS           | A              |        |          |                       |   |              | -               |
|          |              |  |       | Datafile<br>Method           | GEE          | IOTA201            |              | 20 2 20           | 400 110          | 25.            |        |          |                       |   |              |                 |
|          | <b> </b>     |  | 15)   | Sample<br>Datafile           |              | 1-CAL31<br>618014  | F,1855       | 38:1,17           | чэв, NS          | · A            |        |          |                       |   |              |                 |
|          | <u> </u>     | <u> </u>   | 371   | Method                       |              | IOTA20             |              | 41-1 17           | 499 NC           | A.             |        |          |                       | -                                       | <del> </del> | $\vdash$        |
|          |              |  | TD):  | RearSamp<br>Datafile         | 030          | 618015             |              | , /               |                  |                |        |          | 177                   |   |              | <u> </u>        |
|          |              |  | 17)   | Method<br>Sample             | GEE<br>9 122 | IOTA201<br>1-CAL41 | 17<br>F,1881 | 40:1,17           | 498,NS           | A              |        |          |                       |   |              |                 |
|          | -            |  | / /   | Datafile                     | 030          | 618016<br>IOTA20   |              |                   |                  |                |        |          |                       |   |              |                 |
|          |              |  | 18)   | Method<br>RearSamp           | 11 HEX       | ANE                | . ,          |                   |                  |                |        |          |                       | -                                       |              | $\vdash$        |
|          |              |  |       | Datafile<br>Method           |              | 618017<br>IOTA201  | 17           |                   |                  |                |        |          |                       |   |              |                 |
|          |              |  | 19)   | Sample                       | 10 122       | 1-CAL5             |              | 41:1,17           | 498,NS           | A              |        |          | ~                     |   |              |                 |
| -        | ļ            | ļ  |       | Datafile<br>Method           | GEE          | 618018<br>IOTA201  | 17           |                   |                  |                |        |          | -                     | +                                       | -            |                 |
|          |              |  | 20}   | RearSamp                     | 12 124       | 2-CAL1             | 3,1881       | 32:1,17           | 499, NS          | A              |        |          |                       |   | -            | <b>↓</b>        |
|          |              |  | L     | ast Modified:                | : Tue Mar    | 06 10              | :58:59       | 2018              |                  |                |        | Page:    |                       |   |              |                 |
| <b>-</b> | <del> </del> | <del>                                     </del> | i i i | 1 1 1 1                      | j i          | 1 1                | 1            |                   |                  |                | BL     | M 311    | 7/18                  |   |              |                 |
| -        |              | -  |       |                              |              |                    | +            |                   |                  |                | -      |          |                       |   | <u> </u>     | $\vdash \dashv$ |
|          |              |  |       |                              | *            |                    |              |                   |                  |                |        | Continue | d on Page             | <u>5</u>                                |              |                 |
|          |              |  |       |                              | -            |                    |              | Read a            | nd Unde          | rstood By      | /      |          |                       |   |              |                 |
|          |              |  |       | 1 /                          |              |                    |              |                   | م.               |                |        |          |                       | ,                                       |              |                 |
| E        | 3            |  | m.    | 11                           | 2            | 17/18              |              |                   |                  | -2             |        |          | 37                    | /1/1                                    | 6            |                 |
| 5        | <u> </u>     | 1  | S/hi  | ned 1                        |              | Date               |              |                   |                  | Signe          | d      |          |                       | Date                                    |              | -               |
| L        |              |  | 71    |                              |              |                    |              |                   |                  |                |        |          |                       |   |              |                 |

|  |                 |        |  |                    | , i   | *************************************** |     | Villan |   |              | Will Live      |            |       |         | AAAAA     |   | i i                                     | ļ           |       |           |   |      |      | ,    |       |   | \$1<br>\$1<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10   |          |   |
|--|-----------------|--------|--|--------------------|---|---|-----|--------|---|--------------|----------------|------------|-------|---------|-----------|---|---|-------------|-------|-----------|---|------|------|------|-------|---|--|----------|---|
| -  |                 | -      |  | Da                 | itafi   | le                                      |     |        | 03                                      | 3061         | 8019           |            |       |         |           |   |   |             |       |           |   |      |      |      |       |   | -  | -        |   |
|  |                 |        |  | Me                 | thod  |   |     |        | GE                                      | BIO          | TA20           | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 21)  | San                | mple<br>atafi   | 10                                      |     | 11     |   | XAN<br>1061  | E<br>8020      |            |       |         |           |   |   | :,          |       |           |   |      |      |      |       |   |  |          | - |
| -  |                 | -      |  | M€                 | thod  |   |     |        | GE                                      | віо          | TA20           |            |       |         |           |   |   | _           |       |           |   |      |      |      |       | income                                  | +  |          | - |
|  |                 |        | 22)  |                    | rSam<br>tafi  |   |     | 13     |   |              | CAL21<br>8021  | в, 1       | .855  | 43:     | 1,1       | 149                                     | 9, NS                                   | 5           |       |           |   |      |      |      |       |   |  |          |   |
|  | mò tuckinosiski |        |  |                    | thod  |   |     |        | GE                                      | BIO          | TA20           |            |       |         |           |   |   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 23)  | San                |   | 1 -                                     |     | 12     |   |              | CAL11<br>B022  | 3,1        | 881   | 32:     | 1,17      | 7491                                    | 3, NS                                   | A           |       |           |   |      |      |      |       |   | -  |          |   |
|  |                 |        |  |                    | tafi<br>thod  |   |     |        |   |              | BUZZ<br>TA201  | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 24)  |                    | rSam  |   |     | 14     |   |              | CALSI          | 3,1        | 855   | 44:     | 1,17      | 7499                                    | 9, NS                                   | A           |       |           |   |      |      |      |       | nativitana                              |  |          |   |
|  |                 |        |  |                    | tafí<br>thod  |   |     |        |   |              | 8023<br>TA201  | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       |   | -  |          |   |
|  |                 |        | 25)  | Sam                | ple   |   |     | 13     |   |              | CAL2           | В, І       | 855   | 43:     | 1,17      | 7498                                    | B, NS                                   | 4           |       |           |   |      |      |      |       |   | A CONTRACTOR OF THE CONTRACTOR |          |   |
|  |                 |        |  |                    | tafi<br>thod  |   |     |        |   |              | 8024<br>FA201  | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       |   | 1  |          |   |
|  |                 |        | 26)  | Rea                | rSam  | p                                       |     | 15     | 12                                      | 42-0         | CAL4           |            | 855   | 45:     | 1,17      | 1499                                    | , NS                                    | 4           |       |           |   |      |      |      |       | ,                                       | <u> </u>   |          |   |
|  |                 | 700000 |  |                    | tafi  |   |     |        |   |              | 8025<br>FA201  | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 27)  | San                |   |   |     | 14     | 12                                      | 42-          | CALSE          |            | 855   | 44:     | 1,17      | 1498                                    | , NS                                    | <i>A.</i>   |       |           |   |      |      |      |       | *************************************** | +  |          |   |
|  |                 |        |  |                    | tafi<br>thod  |   |     |        |   |              | B026<br>FA201  | 7          |       |         |           |   |   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 28)  |                    | rSam  |   |     | 16     |   |              | CAL5           |            | 855   | 46:     | 1,17      | 499                                     | , NS                                    | A           |       |           |   |      |      |      |       |   |  |          |   |
| -  |                 | _      |  |                    | tafi<br>thod  |   |     |        |   |              | 3027<br>FA201  | 7          |       |         |           |   |   |             |       |           |   |      |      |      |       | W-078-MM                                | <del> </del>   |          |   |
|  |                 |        | 29.)   | San                |   |   |     | 15     |   |              | CAL4E          |            | 855   | 45:     | 1,17      | 498                                     | , NS                                    | 4.          |       |           |   |      |      |      |       |   | MACCA CAGA   |          |   |
|  |                 |        |  | Da                 | tafi  |   |     |        |   |              | 3028           | ר ו        |       |         |           |   |   |             |       |           |   |      |      |      |       | Series                                  |  |          |   |
|  |                 |        | 30)  |                    | thod  |   |     | 17     |   | XANI         | ra201<br>E     | . /        |       |         |           |   |   |             |       |           |   |      |      |      |       | *********                               | -  |          |   |
| Y  |                 |        | - 1  | Da                 | tafi  | le                                      |     |        |   |              | 8029<br>PA201  | . 7        |       |         |           |   |   |             |       |           |   |      |      |      |       |   | -  |          |   |
|  |                 |        | 31)  | Sam                |   |   |     | 16     |   |              | CALSI          |            | 855   | 46:     | 1,17      | 1498                                    | , NSI                                   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        |  | Da                 | tafi.   |   |     |        |   |              | 3030           | _          |       |         |           |   |   |             |       |           |   |      |      |      |       | *****                                   | ļ  |          |   |
|  |                 |        | 321  |                    | rSam  |   |     | 18     |   |              | razol<br>Callo |            | 881   | 34:     | 1,17      | 1499                                    | , NS                                    | 4           |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 02,  | Da                 | tafi  | 1 e                                     |     |        | 03                                      | 061          | 8031           |            |       |         |           |   |   |             |       |           |   |      |      |      |       | -                                       | <b>†</b>   |          |   |
|  |                 |        | 331  | Me<br>San          | thód  |   |     | 17     |   | BIO          | FA201          | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       | ARREST PRO                              | ļ  |          |   |
|  |                 |        | 231  | Da                 | tafi.   |   |     |        | 0.3                                     | 061          | 3032           |            |       |         |           |   |   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 | _      | 341  |                    | thod  |   |     | 19     |   |              | TA201<br>CAL21 |            | 855   | 48:     | 1.17      | 1499                                    | e.NS                                    | 4           |       |           |   |      |      |      |       |   | <b></b>  |          |   |
|  |                 |        | 241  |                    | tafi  |   |     | 10     | 03                                      | 061          | 3033           |            | 000   |         | .,        |   | ,                                       |             |       |           |   |      |      |      |       | 000.00m.c1                              |  |          |   |
|  |                 |        | 251  | Me<br>Sam          | thod  |   |     | 1.8    |   |              | razoi<br>Calli |            | នន 1  | 34+     | 1.17      | 1498                                    | a. NSA                                  | A           |       |           |   |      |      |      |       |   |  |          |   |
| -  |                 |        | 33)  |                    | tafi.   | l e                                     |     | 70     |   |              | 3034           | , 1        | 001   | 27.     | ,, , ,    | ,,,                                     | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | •           |       |           |   |      |      |      |       | *************************************** | <b>-</b>   |          |   |
|  |                 |        | 301  |                    | thod  |   |     | 20     | GE                                      | BIO          | razoi<br>calso | 17         | 055   | 49.     | 1 17      | 2490                                    | a NISI                                  | 7           |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 361  |                    | rSam;<br>tafi   |   |     | 20     |   |              | 3035           | , 1        | 655   | 431.    | . , . ,   | 73.                                     | , 1451                                  | •           |       |           |   |      |      |      |       |   |  |          |   |
| -  |                 | io-w-; | ***  |                    | thod  |   |     | 1.0    | GE                                      | BIO          | ra201<br>Cal20 | 1.7        | 055   | 18.     | 1 17      | 1101                                    | NS1                                     | 2           |       |           |   |      |      |      |       |   | -  |          |   |
|  | Curpaga cándo   |        | 37)  | Sam                | tafi  | le                                      |     | 19     |   |              | 3036           | <i>,</i> 1 | 000   | 40.     | .,.,      | 334                                     | , , , , , , ,                           | •           |       |           |   |      |      |      |       |   |  |          |   |
|  |                 | ****   | 201  |                    | thod  |   |     | 2.1    |   |              | ra201<br>CAL41 |            | 056   | EQ. 1   | 1 10      | 2496                                    | o NICI                                  | ١           |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 38)  |                    | rSam<br>tafi  |   |     | 21     |   |              | 3037           | J , 1      | 655   | 50;     | 1,1       | 42                                      | , 1437                                  | <b>S</b> .  |       |           |   |      |      |      |       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | -  |          |   |
|  |                 |        | 70)  |                    | thod  |   |     | 2.0    |   |              | TA201          |            | OEE   | 10.     | 1 1 7     | 1100                                    | 2 1167                                  | ý.          |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 39)  | Sam<br>Da          | ple<br>tafi   | le                                      |     | 20     |   |              | CAL31<br>3038  | ⊥ ړو       | 0.00  | 43;     | .,1/      | 470                                     | , NG1                                   | *           |       |           |   | ,    |      |      |       |   |  |          |   |
|  |                 |        |  | Me                 | thod  |   |     |        | GE                                      | BIO          | ra201          | 17         | o e è | E1.1    |           | 7 4 0:0                                 | NIC?                                    | Č.          |       |           |   |      |      |      |       |   | ļ  |          |   |
| ***  | and the second  |        | 40)  |                    | rSam<br>tafi  |   |     | 22     |   |              | CAL51          | 1 م ل      | 025   | . تعرب  | . , . /   | 37                                      | , NO!                                   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 4.5  | Me                 | thod  |   |     | 0.3    | GE                                      | BIO          | TA201          | 17         | 000   | εΛ. ·   | . 47      | 1101                                    | a Mer                                   |             |       |           |   |      |      |      |       |   |  |          |   |
|  |                 |        | 41)  | Sam<br>Da          | ple<br>tafi   | le                                      |     | 21     |   |              | CAL41          | J, 1       | 033   | 50:     | . , . ,   | 420                                     | , NO!                                   | 1           |       |           |   |      |      |      |       | ų.                                      | -  | <b>J</b> |   |
| ***************************************  |                 |        |  | Me                 | thod  |   |     | 0.3    | GE                                      | BIO          | rA201          | 17         |       |         |           |   |   |             |       |           |   |      |      |      |       |   | 188111111111111111111111111111111111111  |          |   |
|  | -               | -      | 42)  |                    | rSam<br>tafi  |   |     | 23     |   | XANI<br>0618 | 3041           |            |       |         |           |   |   | ,           |       |           |   |      |      |      |       | and a feet                              |  |          |   |
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|              |  | - 44)  | RearSamp<br>Datafile   | 2.4  | 030618043  | ,  |  | 444  |  |
|              |  | -  | Method   | 2.3  | GEBIOTA2017<br>HEXANE  |  |  |  |  |
|              |  | 40)  | Sample<br>Datafile   | 23   | 030618044  |  |  |  |  |
|              |  | 16)  | Method<br>RearSamp   | 25   | GEBIOTA2017<br>1254-CAL2C, 185553:   | 1.17499.NSA  |  |  |  |
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|              |  | 3 / 2  | Datafile   |      | 030618046  |  |  |  |  |
|              |  | 48)  | Method<br>RearSamp   | 26   | GEBIOTA2017<br>1254-CAL3C,185554:  | 1,17499,NSA  |  |  |  |
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| ļ            |  | 50)  | Method<br>RearSamp   | 27   | GEBIOTA2017<br>1254-CAL4C, 185555:   | 1,17499,NSA  |  |  |  |
|              |  |  | Datafile   |      | 030618049<br>GEBIOTA2017   |  |  |  | -  |
|              |  | 51)  | Method<br>Sample   | 26   | 1254-CAL3C, 185554:  | 1,17498,NSA  |  |  |  |
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|              |  | 52)  | RearSamp   | 28   | 1254-CAL5C, 185556:  | 1,17499,NSA  |  | ***  |  |
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|              |  | - 53)  | Sample   | 27   | 1254-CAL4C, 185555:  | 1,17498,NSA  |  |  |  |
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|              |  | 54)  | RearSamp   | 29   | HEXANE   |  |  | AAAAAAAA   |  |
| -            |  | ***  | Datafile<br>Method   |      | 030618053<br>GEBIOTA2017   |  | 7  | -  | _  |
|              |  | 55)  | Sample   | 28   | 1254-CAL5C, 185556:  | 1,17498,NSA  |  |  |  |
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|              |  | 56)  | RearSamp<br>Datafile   | 30   | 1660-CAL1A, 188136:<br>030618055   | 1,17499,AR1  | • •  | +  | -  |
|              |  | nha.   | Method   |      | GEBIOTA2017  |  |  |  |  |
|              |  | 57)  | Sample<br>Datafile   | 29   | HEXANE<br>030618056  |  |  | and the same of th |  |
|              |  | anne.  | Method   |      | GEBIOTA2017  | 2 27400 701  |  |  |  |
|              |  | _ 58)  | RearSamp<br>Datafile   | 31   | 1660-CAL2A,185558:<br>030618057  | 1,1,1499,ARI   |  |  |  |
| 7777         |  |  | Method   | 20   | GEBIOTA2017<br>1560-CALIA,188136:  | 17498 AR1  |  | of the second se |  |
|              |  | _ 59)  | Sample<br>Datafile   | 30   | 030618058  | 1,1,1,00,1111  |  |  |  |
|              |  | ~~   | Method   | 32   | GEBIOTA2017<br>1660-CAL3A, 185559:   | 1.17499.AR1  |  |  | _  |
|              |  | . 60)  | RearSamp<br>Datafile   | 32   | 030618059  | */ * · · · · · · · · · · · · · · · · · ·   |  |  |  |
|              |  | 633  | Method<br>Sample   | 31   | GEBIOTA2017<br>1660-CAL2A,185558:  | 1.17498.AR1  |  |  |  |
| -            |  | - 01;  | Datafile   | 51   | 030618060  |  |  | +  | _  |
|              |  | 621  | Method<br>RearSamp   | 33   | GEBIOTA2017<br>1660-CAL4A, 185560:   | 1,17499,AR1  |  |  |  |
|              |  | 1  | Datafile   |      | 030618061  | •  |  |  |  |
|              |  | 631  | Method<br>Sample   | 32   | GEBIOTA2017<br>1660-CAL3A,185559:  | 1,17498,AR1  |  | Table 100 management of the control  | -  |
|              |  |  | Datafile   |      | 030618062  |  |  | TARABA MARANA  | j  |
|              |  | 64)  | Method<br>RearSamp   | 34   | GEBIOTA2017<br>1660-CAL5A, 185561:   | 1,17499,AR1  |  | and an artist of the second  |  |
|              |  | -  | Datafile<br>Method   |      | 030618063<br>GEBIOTA2017   |  |  | +  | +  |
|              |  | 65)  | Sample   | 33   | 1660-CAL4A, 185560:  | 1,17498,AR1  |  |  |  |
| 4            |  |  | Datafile<br>Method   |      | 030618064<br>GEBIOTA2017   |  |  |  |  |
|              | -  | 66)  | RearSamp   | 35   | HEXANE   |  |  | -  |  |
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|                |             |  | -                                       |      | Met          |  |  |     |              | IOT                                    |       |       |      |          |           |      |       |             |    |  |    |       |   |      | -          | -                                       |          |   | $\vdash$ |
|                |             |  | 67                                      | ) !  | Samp.        | le<br>afile  |  | 34  |              | 0-C/<br>6180                           |       | A, 10 | 3556 | 1:1,     | 174       | 98,  | AR1   |             |    |  |    |       |   |      | _          | _                                       |          |   | $\vdash$ |
|                |             |  |   |      | Met          | nod  |  |     | GEB          | IOTA                                   | 120   |       |      |          |           |      | 34    |             |    |  |    |       |   |      |            |   | -        |   |          |
|                |             |  | - 68                                    | ) I  | Rear         | Samp   |  | 36  |              | 1-I0                                   |       | 188   | 142: | 1,17     | 499       | , AR | 122   |             |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  | **                                      |      | Metl         | nod  |  |     |              | IOTA                                   |       | 17    |      |          |           |      |       |             |    |  |    |       |   |      | -          |   |          |   |          |
|                |             |  | 69                                      | ) :  | Samp.        | le<br>afile  |  | 35  | HEX          | ANE<br>6180                            | 160   |       |      |          |           |      |       |             |    |  |    |       |   |      |            | -                                       |          |   |          |
|                |             |  | +                                       |      | Meti         |  |  |     | GEB          | IOTA                                   | 1201  |       |      |          |           |      |       |             | •  |  |    |       |   |      | +          | -                                       |          |   |          |
|                |             |  | 70                                      | ) .E | Rears        | Samp<br>sfile  |  | 37  |              |  |       | 855   | 62:  | 1,17     | 499,      | AR   | 124   | OK          |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  | •                                       |      | Meth         |  |  |     |              | 6180<br>IOT <i>i</i>                   |       | 1.7   |      |          |           |      |       |             |    |  |    |       |   |      |            | *************************************** |          |   |          |
|                |             |  | . 71                                    | ) 5  | Sampl        |  |  | 36  |              |  |       | 881   | 42;  | 1,17     | 498,      | AR   | 122   | OIL         |    |  |    |       |   |      | -          | -                                       |          |   | -        |
|                |             |  |   |      | Meth         | afále<br>nod   |  |     | GEB          | 6180<br>IOT <i>I</i>                   | 1201  |       |      |          |           |      |       |             |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  | 72)                                     | ) F  | Rears        |  |  | 38  |              |  |       | 855   | 63:1 | .17      | 499,      | AR   | 124   | OK          |    |  |    |       |   |      | -          | charborness                             |          |   |          |
|                |             |  |   |      | Meth         | file<br>od   |  |     |              | 6180<br>IOTA                           |       | 7     |      |          |           |      |       |             |    |  |    |       |   |      | -          |   | -        |   |          |
|                |             |  | 73)                                     | ) 5  | ampl         |  |  | 37  |              |  |       | 855   | 62:1 | ,17      | 498,      | AR   | 124   | oi          |    |  |    |       |   |      | - New York |   |          |   |          |
|                |             |  | •                                       |      | Meth         | file   |  |     |              | 6180<br>IOTA                           |       | 7     |      |          |           |      |       |             |    |  |    |       |   |      |            |   |          |   |          |
|                |             | -  | 74)                                     | E    | Rears        |  |  | 39  |              |  |       | 855   | 64:1 | ,17      | 499,      | AR   | 1.25  | ٥٧          |    |  |    |       |   |      | +          | -                                       | -+       |   | -        |
|                |             |  |   |      | Meth         | file   |  |     |              | 6180<br>IOTA                           |       | .7    |      |          |           |      |       |             |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  | 75)                                     | ) 5  | Sampl        |  |  | 38  |              |  |       | 855   | 63;1 | , 17     | 498,      | AR   | 124   | OVE         |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  |   |      | Meth         |  |  |     | GEB:         | 6180<br>IOTA                           |       | .7    |      |          |           |      |       |             |    |  |    |       |   |      | +-         | -                                       | -        |   |          |
|                |             |  | 76)                                     | F    | lears        | amp<br>file  |  | 40  |              |  |       | 855   | 65:1 | ,17      | 499,      | AR   | 166   | OL          |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  |   |      | Meth         | od   |  |     | GEB.         |  | 201   |       |      |          |           |      |       |             |    |  |    |       |   |      |            | -                                       |          |   |          |
|                |             |  | 77)                                     | 5    | ampl         | file   |  | 39  | 030          |  |       | 855   | 64:1 | ,17      | 498,      | AR:  | 125   | OK          |    |  |    |       |   |      | +          | $\dashv$                                | -+       |   |          |
| 100            |             |  |   |      | Meth         | od   |  |     | GEB:         | IOTA                                   | 201   |       |      |          |           |      |       |             |    |  |    |       |   |      | 1_         |   |          |   |          |
|                |             |  | 78)                                     | F    | hars         | file   |  | 41  | 030          |  |       | 188   | 138: | 1,1      | 7499      | , R  | L12   | οL          |    |  |    |       |   |      |            | Audentheren                             | -        | *************************************** |          |
|                |             |  |   |      | Meth         | od   |  |     | GEB:         | OTA                                    | 201   |       |      |          |           |      |       |             |    |  |    |       |   |      | +          | +                                       | -        | -                                       | -        |
|                |             |  | 79)                                     | 5    | ampl<br>Data | e<br>file  |  | 40  | 0300         |  |       | 855   | 65:1 | ,17      | 498,      | AR:  | 1 6.6 | <i>الاد</i> |    |  |    |       |   |      |            |   |          |   |          |
| -              |             |  |   |      | Meth         | od   |  |     | GEB:         | OTA                                    | 201   |       |      |          |           |      |       |             |    |  |    |       |   |      | -          |   | -        |   | .        |
|                |             |  | 80)                                     | B    | Data         | amp<br>file  |  | 42  | 1242         |  |       | 188   | 132: | 1,1      | 7499      | , R  | L12   | ملا         |    |  |    |       |   |      | +          | 1                                       |          |   |          |
|                |             |  |   |      | Meth         | od   |  |     | GEB:         | OTA                                    | 201   |       |      |          |           |      |       |             |    |  |    |       |   |      |            |   |          |   |          |
| 944 944        |             | 44.0   | 81)                                     |      | ampl<br>Data | e<br>file  |  | 41  | 0306         |  |       | 188   | 138: | 1,1      | 7498      | , R  | L12   | مد          |    |  |    |       |   |      | -          | *************************************** | 400      | Ì                                       |          |
|                |             |  |   |      | Meth         | od   |  |     | GEB:         | ATO                                    | 201   |       |      |          |           |      |       |             |    |  |    |       |   |      | 1          | -                                       |          |   | _        |
|                |             |  | 82)                                     | R    | earS<br>Data | amp<br>file  |  | 43  | 0306         |  |       | 188   | 134: | 1,4      | 1,4,99    | , R1 | 4.1.2 | ٥٧.         |    |  |    |       |   |      |            |   |          |   |          |
|                |             |  |   |      | Meth         | od.  |  |     | GEB          | OTA                                    | 201   |       | 170  |          | 2400      |      | 10    |             |    |  |    |       |   |      |            |   | -        |   |          |
|                |             |  | 83)                                     |      | ampl<br>Data | e<br>file  |  | 42  | 0306         |  |       | 188   | 132: | 1,1      | 1498      | , K1 | 112   | DV          |    |  |    |       |   |      | -          | +                                       |          |   |          |
|                |             |  | 0.43                                    |      | Meth         |  |  |     | GEBI         |  |       |       | 126. |          | 1400      | nı   | 1 2   |             |    |  |    |       |   |      | ļ          |   |          |   | _        |
|                |             |  | B 4 )                                   |      | earS<br>Data | amp<br>file  |  | 44  | 0306         |  |       | 168   | 135: | 1,1      | 7499      | , PG | 112   | DIL         |    |  |    |       |   |      |            |   | -        | -                                       |          |
|                |             |  | 051                                     |      | Meth         |  |  | 4.3 | GEBI         |  |       |       | 134: |          | 7 / 0 0   | י כו | 15    | -1          |    |  |    |       |   |      | -          | $\dashv$                                |          |   |          |
|                |             |  | 6 J.)                                   |      | ampl<br>Data | file   |  | 4.5 | 0306         |  |       | 100   | 134, | ± , ±    | 7430      | ,    | 33.6  |             |    |  |    |       |   |      | -          | -                                       |          |   |          |
| -              | uplice name |  | 861                                     |      | Meth<br>ears |  |  | 15  | GEB1         |  |       |       | 136: | 1 1-     | 7499      | RI   | .16   | ~/.         |    |  |    |       |   |      | 444        |   |          |   |          |
|                |             |  | 0,0)                                    |      | Data         | file   |  | 73  | 030€         | 180                                    | 85    |       | 100, | ±., , ±. | , , , , , | ,    |       | <i></i>     |    |  |    |       |   |      | 1          |   |          |   |          |
|                |             |  | 871                                     |      | Meth<br>ampl |  |  | 44  | GEB1         |  |       |       | 135: | 1.11     | 7498      | . RT | .12   | ~/          |    |  |    |       |   |      | -          | -                                       |          | _                                       |          |
| THE PERSON IN  |             |  | Q ? )                                   |      | Data         | file   |  | -17 | 0306         | 180                                    | 86    |       |      | ~ , *    |           | ,    |       | بالاي       |    |  |    |       |   |      | Michael    | -                                       |          | -                                       |          |
| -              |             |  | 881                                     |      | Meth<br>ears |  |  | 46  | GEB1<br>HEXA |  | 201   | 7     |      |          |           | •    |       |             |    |  |    |       |   |      |            | 1                                       | -        |   |          |
|                |             |  | V = 7                                   |      | Data         | file   |  |     | 0306         | 180                                    |       | _     |      |          |           |      |       |             |    |  |    |       |   |      | -          | _                                       |          |   |          |
|                |             | or consideration of the constraints of the constrai | 891                                     |      | Meth<br>ampl |  |  | 45  | GEB1         |  |       |       | 136: | 1,17     | 7498      | , RI | 116   | oL          |    |  |    |       |   |      |            | 4                                       |          |   |          |
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|                |             | -  |   |      | Meth         | Ju   |  |     | GEBI         | A'L U                                  | Z U I | ,     |      |          |           |      |       |             |    |  |    |       |   |      | -          | - in                                    |          |   |          |
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|                |             | - war war and  | *************************************** |      |              | e de la companya de l | and the same of th | -   |              |  | -     |       |      |          |           |      |       |             |    |  | Co | ntinu | ed                                      | on P | age        |   | _        |   |          |
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|   | 1) Unlinked 2) RearSamp l prime                  |   |                    |   |            |
|   | Datafile 050318                                  |   |                    |   |            |
|   | 3) Sample 2 prime                                |   |                    |   |            |
| *************************************** | Datafile 050318<br>Method GEBIOT                 |   |                    |   |            |
|   | 4) RearSamp 3 HEXANE                             |   |                    |   |            |
|   | Datafile 050318<br>Method GEBIOT                 |   |                    |   |            |
|   | 5) Sample 4 HEXANE<br>Datafile 050318            | 004                                       |                    |   |            |
|   | Method GEBIOT.                                   |   |                    | -   |            |
|   | 6) RearSamp 5 HEXANE<br>Datafile 050318          |   |                    |   |            |
|   | Method GEBIOT. 7) Sample 6 HEXANE                | A2017                                     |                    |   |            |
|   | Datafile 050318                                  |   |                    |   |            |
| 44                                      | 8) RearSamp 7 1232-C.                            | AL3S, 185539:1, 17762, NSA                | C.                 |   |            |
|   | Datafile 050318<br>Method GEBIOT                 | A2017                                     |                    |   |            |
|   | 9) Sample 8 1232-C                               | AL3S, 185539:1, 17761, NSA                | •                  | -   |            |
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|   | 10) RearSamp 9 1221-C.  Datafile 050318          | AL1F,188138:1,17762,NSA                   |                    |   |            |
|   | Mothod GERIOT                                    | 32017                                     |                    |   |            |
|   | 11) Sample 10 1221-C<br>Datafile 050318          | AL1F,188138:1,17761,NSA                   | •                  |   |            |
| 10.00                                   | Method GEBIOT<br>12) RearSamp 11 1221-C          | A2017<br>AL2F, 188139:1, 17762, NSA       |                    |   |            |
|   | Datafile 050318                                  | 011                                       |                    |   |            |
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|   | Datafile 050318                                  | 012<br>A2017                              |                    |   |            |
|   | 14) RearSamp 13 1221-C                           | AL3F, 185538:1,17762, NSA                 |                    |   |            |
|   | Datafile 050318<br>Method GEBIOT                 | A2017                                     |                    |   |            |
|   | 15) Sample 14 1221-C<br>Datafile 050318          | AL3F, 185538:1,17761, NSA                 | •                  | -   |            |
|   | Method GEBIOT                                    |   |                    |   |            |
|   | Datafile 050318                                  | 015                                       |                    | Contraction   |            |
|   | Method GEBIOT 17) Sample 16 1221-C               | A2017<br>AL4E,188140:1,17761,NSA          |                    |   |            |
|   | Datafile 050318                                  | 016<br>A2017                              |                    |   |            |
|   | 18) RearSamp 17 1221-C                           | AL5F,188141:1,17762,NSA                   | t .                |   |            |
|   | Datafile 050318<br>Method GEBIOT                 | A2017                                     |                    | April 100 and |            |
|   | 19) Sample 18 1221-C<br>Datafile 050318          | AL5F,188141:1,17761,NSA                   | •                  |   |            |
|   | Method GEBIOT                                    |   |                    |   |            |
|   | 20) RearSamp 19 HEXANE                           |   | Page 1             |   |            |
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|   | 1 }  | Read and Under                            | stood By .         | ,   |            |
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|           |               |       | TO COMPANY                     |         |  |              |              |   |     |   |
|           |               | :     | Last Modifi                    | ed: Thu | May 03 09:34:43 2                              | 018          | Page: 2      |   |     |   |
|           |               |       | Method                         |         | GEBIOTA2017                                    |              |              |   |     |   |
|           |               | 4:3)  | Sample<br>Datafile             | 42      | 1248-CAL5D, 185551<br>050318042                | :1,17761,NSA |              |   |     |   |
|           |               | *2)   | Datafile<br>Method             |         | 050318041<br>GEBIOTA2017                       |              |              |   |     |   |
|           |               |       | Method<br>RearSamp             | 41      | GEBIOTA2017<br>1248-CAL5D, 185551              | :1,17762,NSA |              |   |     |   |
|           |               | 4.1)  | Method<br>Sample<br>Datafile   | 40      | GEBIOTA2017<br>1248-CAL4D,185550<br>050318040  | :1,17761,NSA |              |   |     |   |
|           |               | 4.0)  | RearSamp<br>Datafile           | 39      | 1248-CAL4D, 185550<br>050318039                | :1,17762,NSA |              |   |     |   |
|           |               |       | Datafile<br>Method             |         | 050318038<br>GEBIOTA2017                       |              |              |   |     |   |
|           |               | 39)   | Method<br>Sample               | 38      | GEBIOTA2017<br>1248-CAL3D, 185549              | :1,17761,NSA |              |   |     |   |
|           |               | 38}   | Method<br>RearSamp<br>Datafile | 37      | GEBIOTA2017<br>1248-CAL3D, 185549<br>050318037 | :1,17762,NSA |              |   |     |   |
|           |               | 37)   | Sample<br>Datafile             | 36      | 1248-CAL2D, 185548<br>050318036<br>CERIOTA2017 | :1,1//01,NSA |              |   |     |   |
|           |               |       | Datafile<br>Method             |         | 050318035<br>GEBIOTA2017                       |              |              | _                                       |     | _ |
|           |               | 36)   | Method<br>RearSamp             | 35      | GEBIOTA2017<br>1248-CAL2D, 185548              | :1,17762,NSA |              |   |     |   |
| ļ         |               | 35)   | Sample<br>Datafile             | 34      | 1248-CALID, 188134<br>050318034                | :1,17761,NSA |              |   |     |   |
| <b> </b>  |               | 241   | Datafile<br>Method             |         | 050318033<br>GEBIOTA2017                       |              |              |   |     |   |
| ļ         |               | 3 / 1 | Datafile<br>Method<br>RearSamp | ন্ত্ৰ   | GEBIOTA2017<br>1248-CAL1D, 188134              | :1,17762,NSA |              |   |     |   |
| -         |               | 33)   | Method<br>Sample               | 32      | GEBIOTA2017<br>HEXANE<br>050318032             |              |              |   |     |   |
| -         |               | 32)   | RearSamp<br>Datafile           | 31      | 050318031                                      |              |              | _                                       |     |   |
|           |               |       | Datafile<br>Method             |         | 050318030<br>GEBIOTA2017                       |              |              |   |     |   |
|           |               | 31)   | Method<br>Sample               | 30      | GEBIOTA2017<br>1242-CAL5B, 185546              | :1,17761,NSA |              |   |     |   |
| <u> </u>  |               | 30)   | RearSamp<br>Datafile           | 29      | 1242-CAL5B, 185546<br>050318029                | :1,17762,NSA |              |   |     |   |
| <b></b> - |               | 29)   | Datafile<br>Method             |         | 050318028<br>GEBIOTA2017                       |              |              |   |     |   |
|           |               | 201   | Method<br>Sample               | 28      | GEBIOTA2017<br>1242-CAL4B, 185545              | :1,17761,NSA |              |   | -   |   |
|           |               | 28)   | Method<br>RearSamp<br>Datafile | 27      | GEBIOTA2017<br>1242-CAL4B, 185545<br>050318027 | :1,17762,NSA |              |   |     |   |
|           |               | 27)   | Sample<br>Datafile             | 26      | 1242-CAL3B, 185544<br>050318026                | :1,17761,NSA |              | *************************************** |     |   |
|           |               |       | Datafile<br>Method             |         | 050318025<br>GEBIOTA2017                       |              |              |   |     |   |
|           | -             | 26)   | Method<br>RearSamp             | 25      | GEBIOTA2017<br>1242-CAL3B, 185544              | :1,17762,NSA |              |   |     |   |
|           | - To the same | 25)   | Sample<br>Datafile             | 24      | 1242-CAL2B, 185543<br>050318024                | :1,17761,NSA |              |   |     |   |
|           |               | 27)   | Datafile<br>Method             |         | 050318023<br>GEBIOTA2017                       | *            |              |   |     |   |
|           |               | 243   | Datafile<br>Method<br>RearSamp | 23      | 050318022<br>GEBIOTA2017<br>1242-CAL2B, 185543 | :1,17762,NSA |              |   |     |   |
|           |               | 23)   | Method<br>Sample               | 22      | GEBIOTA2017<br>1242-CAL1B, 188132              | :1,17761,NSA |              |   |     |   |
|           |               | 22)   | RearSamp<br>Datafile           | 21      | 1242-CAL1B, 188132<br>050318021                | :1,17762,NSA |              | _                                       |     |   |
|           | 1             | 7     | Datafile<br>Method             |         | 050318020<br>GEBIOTA2017                       |              |              |   |     |   |
|           |               | 211   | Datäfile<br>Method<br>Sample   | 20      | GEBIOTA2017<br>HEXANE                          |              |              |   |     |   |
|           |               |       |                                |         | 050318019                                      |              |              | *                                       | 1 1 |   |

|          | T                                       |  | 1           |                       |     |   | 1                                       | -              | Total Base   |   |
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|          |   |  | 4.4.1       | Dear Comp             | 42  | HEXANE  | -                                       |                |  |   |
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|          | ļļ.                                     | ******   |             | Method                |     | GEBIOTA2017                                     |   | -              | -  |   |
|          | -                                       |  | 45)         | Sample<br>Datafile    | 44  | HEXANE<br>050318044                             |   |                |  |   |
|          |   |  |             | Method                |     | GEBIOTA2017                                     | *************************************** |                |  |   |
|          |   |  | 46)         | RearSamp<br>Datafile  | 45  | 1254-CALIC,188135:1,17762,NSA<br>050318045      | NC-MON-MON-MAN                          | <u> </u>       |  |   |
|          |   |  |             | Method                |     | GEBIOTA2017                                     |   |                |  |   |
|          | -                                       | ********   | 47)         | Sample                | 46  | 1254-CALIC, 188135:1,17761, NSA                 |   | <del> </del>   | -  |   |
|          |   |  |             | Datafile<br>Method    |     | 050318046<br>GEBIOTA2017                        |   |                |  |   |
|          |   | NOTE AND DESCRIPTION OF THE PERSON OF THE PE | 48)         | RearSamp              | 47  | 1254-CAL2C, 185553:1, 17762, NSA                |   | was the format |  |   |
|          |   |  |             | Datafile<br>Method    |     | 050318047<br>GEBIOTA2017                        |   | -              |  |   |
|          | 1                                       |  | 49)         | Sample                | 48  |   |   |                |  |   |
|          | -                                       | ALLOHANDON,  | ,           | Datafile              |     | 050318048                                       | ,                                       |                | 1  |   |
|          |   |  | 501         | Method<br>RearSamp    | 49  | GEBIOTA2017<br>1254-CAL3C,185554:1,17762,NSA    |   |                |  |   |
|          |   | in the second  | 50,         | Datafile              | , , | 0,50318049                                      |   | 1              |  |   |
|          |   | ********   | F 7 \       | Method                | 50  | GEBIOTA2017<br>1254-CAL3C, 185554:1, 17761, NSA |   | -              | -  |   |
|          |   |  | 21)         | Sample<br>Datafile    | 50  | 050318050                                       |   |                |  |   |
|          |   | unanananan   |             | Method                |     | GEBIOTA2017                                     | - 100-100 000 000                       |                |  |   |
|          | V-                                      |  | 52)         | RearSamp<br>Datafile  | 51  | 1254-CAL4C,185555:1,17762,NSA<br>050318051      |   |                | -  |   |
|          |   |  |             | Method                |     | GEBIOTA2017                                     |   | No.            | -  | *************************************** |
|          | -                                       | and a second   | 53)         | Sample                | 52  | 1254-CAL4C,185555:1,17761,NSA<br>050318052      |   | -              | · · · · ·  |   |
|          |   |  |             | Datafile<br>Method    |     | GEBIOTA2017                                     | Annancolodore                           |                |  |   |
|          |   |  | 54)         | RearSamp              | 53  | 1254-CAL5C, 185556:1,17762, NSA                 |   |                |  |   |
|          |   |  |             | Datafile<br>Method    |     | 050318053<br>GEBIOTA2017                        | Anno 1811                               |                | -  |   |
|          |   |  | 55)         | Sample                | 54  | 1254-CAL5C, 1855556:1, 17761, NSA               |   |                | 1  |   |
|          | -                                       |  |             | Datafile              |     | 050318054<br>GEBIOTA2017                        |   |                |  |   |
|          |   |  | 56)         | Method<br>RearSamp    | 5.5 | HEXANE  |   | ļ              | ļ  |   |
|          |   |  |             | Datafile              |     | 050318055                                       |   |                |  |   |
| ļ        | -                                       | War com  | 571         | Method<br>Sample      | 56  | GEBIOTA2017<br>HEXANE                           | y                                       |                | <del>                                     </del>   |   |
|          |   |  | 5,1         | Datafile              | •   | 050318056                                       |   |                |  |   |
|          | -                                       |  | <i></i> ^ . | Method                | 57  | GEBIOTA2017<br>1660-CALIA,188136:1,17762,AR1    |   |                |  |   |
|          |   |  | 20)         | RearSamp<br>Datafile  | 5 ' | 050318057                                       | ************                            |                |  | -                                       |
|          |   |  |             | Method                | r.c | GEBIOTA2017<br>1660-CAL1A,188136:1,17761,AR1    |   |                |  |   |
|          | ļļ.                                     | Medical Conference   | 59}         | Sample<br>Datafile    | 26  | 050318058                                       | u.blumarrer                             |                |  |   |
|          |   |  |             | Method                |     | GEBIOTA2017                                     |   | ļ              | ļ  |   |
|          |   | inacionium e de  | 60)         | RearSamp<br>Datafile  | 59  | 1660-CAL2A, 185558:1,17762, AR1<br>050318059    |   |                |  |   |
|          |   |  |             | Method                |     | GEBIOTA2017                                     | -                                       |                |  |   |
|          |   |  | 61)         | Sample                | 60  | 1660-CAL2A, 185558:1,17761,AR1<br>050318060     |   |                |  |   |
|          |   |  |             | Datafile<br>Method    |     | GERIOTA2017                                     |   |                |  |   |
| <b></b>  | <u> </u>                                | MACONO CA  | 62)         | RearSamp              | 61  | 1660-CAL3A, 185559:1, 17762, AR1                |   | ļ              | -  | <del> </del>                            |
|          | *************************************** |  |             | Datafile<br>Method    |     | 050318061<br>GEBIOTA2017                        |   | *              | en capacitation  |   |
|          |   |  | 63)         | Sample                | 62  | 1660-CAL3A,185559:1,17761,AR1                   |   |                | and the same of th |   |
|          |   |  |             | Datafile<br>Method    |     | 050318062<br>GEBIOTA2017                        |   | 1              | -  | -                                       |
|          |   |  | 64)         | RearSamp              | 63  | 1660-CAL4A,185560:1,17762,AR1                   |   | V-100          |  | -                                       |
| ļ        |   |  |             | Datafile<br>Method    |     | 050318063<br>GEBIOTA2017                        | *************************************** |                | +  | 1                                       |
|          | 4                                       |  | 65)         | Sample                | 64  | 1660-CAL4A, 185560:1, 17761, AR1                |   |                | -  | 1                                       |
|          |   |  |             | Datafile              |     | 050318064 .<br>GEBIOTA2017                      |   |                | -  | and control to                          |
| <b>_</b> | ļļ.                                     |  | 661         | Method<br>RearSamp    | 65  | 1660-CAL5A, 185561:1, 17762, AR1                | ~                                       | -              | <b> </b>   | 1                                       |
|          |   |  | - 0 /       | Datafile              |     | 050318065                                       |   |                |  |   |
| <b></b>  | <del> </del>                            | ****   |             | Last Modified:        | Thu | May 03 09:34:43 2018 Page: 3                    | 1740111                                 |                |  |   |
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|              |   |           | Metňod   |          | GEBIOTA2017                                     |  |
|              | į                                       | 671       | Sample   | 66       | 1660-CAL5A, 185561:1,17761, AR1                 |  |
| 1            |   | 0.,       | Datafile   |          | 050318066                                       |  |
|              |   |           | Method   |          | GEBIOTA2017                                     |  |
| 1            |   | 68)       | RearSamp   | 67       | HEXANE  |  |
|              |   |           | Datafile   |          | 050318067<br>GEBIOTA2017                        |  |
|              |   | 601       | Method<br>Sample   | 68       | HEXANE  |  |
| 1 1          |   | 05)       | Datafile   | 00       | 050318068                                       |  |
| -            |   |           | Method   |          | GERTOTA 2017                                    |  |
|              |   | 70)       | RearSamp   | 69       | 1221-TCV, 188142:1, 17762, AR122 💁              |  |
|              |   |           | Datafile   |          | 050318069                                       |  |
|              |   | 771       | Method   | 20       | GEBIOTA2017<br>1221-ICV,188142:1,17761,AR122    |  |
|              |   | 111       | Sample<br>Datafile   | , 0      | 050318070                                       |  |
|              | į                                       |           | Method   |          | GERIOTA 2017                                    |  |
|              |   | 72)       | RearSamp   | 71       | 1242-ICV, 185562:1, 17762, AR124                |  |
|              |   |           | Datafile   |          | 050318071                                       |  |
|              | ***                                     | 771       | Method   | 72       | GEBIOTA2017<br>1242-ICV,185562:1,17761,ARI24    |  |
|              |   | 131       | Sample<br>Datafile   | 1        | 050318072                                       |  |
|              | *************************************** |           | Method   |          | GERIOTA2017                                     |  |
|              |   | 74)       | RearSamp   | 73       | 1248-ICV, 185563:1, 17762, AR124 OL             |  |
|              |   |           | Datafile   |          | 050318073                                       |  |
|              |   | 35.       | Method   | 74       | GEBIOTA2017<br>1248-ICV,185563:1,17761,AR124 ol |  |
|              | A.A.A.                                  | 75)       | Sample<br>Datafile   | 14       | 050318074                                       |  |
| $\vdash$     |   |           | Method   |          | CERIOTA 2017                                    |  |
|              |   | 76)       | RearSamp   | 75       | 1254-ICV, 185564:1, 17762, AR125                |  |
| H            |   |           | Datafile   |          | 050318075                                       |  |
|              |   | 221       | Method   | 76       | GEBIOTA2017<br>1254-ICV,185564:1,17761,AR125 F  |  |
|              |   | 1 ()      | Sample<br>Datafile   | 7.6      | 050318076                                       |  |
|              | Ē                                       |           | Method   |          | CERIOTA 2017                                    |  |
|              |   | 78)       | RearSamp   | 77       | 1660-ICV, 185565:1, 17762, AR166                |  |
|              |   |           | Datafile   |          | 050318077                                       |  |
|              |   | 7.01      | Method   | rs en    | GEBIOTA2017<br>1660-ICV,185565:1,17761,AR166 F  |  |
|              |   | 79)       | Sample<br>Datafile   | 18       | 050318078                                       |  |
|              |   |           | Method   |          | GEBIOTA2017                                     | -  |
|              |   | 80)       | RearSamp   | 79       | 1679886,,17744,BIOTA                            |  |
|              |   |           | Datafile   |          | 050318079                                       |  |
|              |   | 0.7.      | Method   | 9.0      | GEBIOTA2017<br>1681428,,17750,BIOTA             |  |
|              |   | 81)       | Sample<br>Datafile   | 80       | 050318080                                       |  |
| ļļ.          |   |           | Method   |          | GEBIOTA2017                                     |  |
|              |   | 82)       | RearSamp   | 81       | 1679887,,17744,BIOTA                            |  |
| <del> </del> |   |           | Datafile   |          | 050318081                                       |  |
|              | İ                                       |           | Method   | 0.0      | GEBIOTA2017<br>1681429,,17750,BIOTA             |  |
| <b> </b>     |   | 83)       | Sample<br>Datafile   | 04       | 050318082                                       |  |
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| <b></b>      |   | 84)       | RearSamp   | 83       | 40158013001 x2,,17744,BIOTA                     |  |
|              |   |           | Datafile   |          | 050318083                                       |  |
|              | 1                                       | or.       | Method   | 84       | GEBIOTA2017<br>40157940015 x20,,17750,BIOTA     | Table of the second of the sec |
|              |   | 85)       | Sample<br>Datafile   | 04       | 050318084                                       |  |
|              |   |           | Method   |          | GERIOTA2017                                     | Transmission and the second  |
|              | -                                       | 86)       | RearSamp   | 85       | 40158013002 x5,,17744,BIOTA                     |  |
|              | 4                                       |           | Datafile   |          | 050318085<br>GEBIOTA2017                        |  |
|              |   | 271       | Method<br>Sample   | 86       | 1681430 ×20,,17750,BIOTA                        |  |
|              | Ī.                                      | 07)       | Datafile   | 3.0      | 050318086                                       |  |
|              | - i                                     |           | Method   |          | GEBIOTA2017                                     |  |
|              |   | 88)       | RearSamp   | 87       | 40158013003 x5,,17744,BIOTA                     | Lago of age  |
| -            |   |           | Datafile   |          | 050318087<br>GEBIOTA2017                        |  |
|              | 1                                       | gai       | Method<br>Sample   | 88       | 1681911 x20,,17750,BIOTA                        | Land State   |
|              |   | 051       | Datafile   |          | 050318088                                       | 100  |
|              |   |           | Method   |          | GERIOTA2017                                     | Example of the control of the contro |
|              | -                                       | 90)       | RearSamp   | 89       | 40158013004 x5,,17744,BIOTA                     |  |
|              |   |           | Datafile   |          | 050318089                                       | A COLUMN   |
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|  |  | 91)  | Sample               | 90      | 40157948008                           | x2,,17  | 7750,B   | IOTA     |           |          |     |         |          |             |     |   |                        |
|  |  |      | Datafile<br>Method   |         | 050318090<br>GEBIOTA2017              |         |          |          | iy.       |          |     |         |          |             |     |   |                        |
|  | +  | 92)  | RearSamp<br>Datafile | 91      | 40158013005<br>050318091              | ,,17744 | 4, BIOT. | A        |           |          |     |         |          | -           |     |   |                        |
|  |  |      | Method               |         | GEBIOTA2017                           |         |          |          |           |          |     |         |          |             |     |   |                        |
|  |  | 93)  | Sample<br>Datafile   |         | 40157948009<br>050318092              | x2,,17  | 7750,B   | IOTA     |           |          |     |         |          |             |     |   |                        |
|  |  | 0.43 | Method<br>RearSamp   |         | GEBIOTA2017<br>40158028001            |         | 7744 9   | מייחיד   |           |          |     |         |          |             |     |   |                        |
|  | +  | 34)  | Datafile             | 3.3     | 050318093                             |         | //44,0   | 1012     |           |          |     |         |          |             |     |   | $\vdash$               |
|  |  | 951  | Method<br>Sample     | 94      | GEBIOTA2017<br>40157948011            | ×101    | 7750.1   | BIOTA    |           |          |     |         |          |             |     |   |                        |
| and the same of th |  |      | Datafile<br>Method   |         | 050318094<br>GEBIOTA2017              |         |          |          |           |          |     |         |          |             |     |   |                        |
|  | 1  | 96)  | RearSamp             |         | 40158028002                           | x5,,17  | 7744,B   | IOTA     |           |          |     |         |          |             |     |   |                        |
|  | -  |      | Datafile<br>Method   |         | 050318095<br>GEBIOTA2017              |         |          |          |           |          |     |         |          |             |     |   | $\vdash$               |
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|  | 9.7)     | Sample   | 96      | 1681432 x10,,17750,BIOTA                     | +               |
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|  | 901      | RearSamp<br>Datafile   | 97      | 050318097                                    |                 |
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|  | 99)      | Sample   | 98      | 40157948014 ×5,,17750,BIOTA                  | -               |
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|  | 100)     | Method<br>RearSamp   | 99      | 1221-CCV, 185538:1, 17762, AR122             | 1               |
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|  | 101)     | Sample<br>Datafile   | 100     | 1221-CCV, 185538:1,17761, AR122<br>050318100 | Mary April 1981 |
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|  | 102)     | RearSamp   | 1       | 1221-CCV, 185538:1, 17762, AR122 OL          | -               |
|  |          | Datafile   |         | 050318101                                    | 1               |
|  | 1031     | Method<br>Sample   | 2       | GEBIOTA2017<br>1221-CCV,185538:1,17761,AR122 |                 |
|  | 1,0.5.7  | Datafile   | 4       | 050318102                                    |                 |
|  |          | Method   |         | GEBIOTA2017                                  | 4               |
| -  | 104)     | RearSamp   | 3       | 40158028004 x10,,17744,BIOTA                 | es wood's sad   |
|  |          | Datafile<br>Method   |         | 050318103<br>GEBIOTA2017                     |                 |
| Paranasa   | 1051     | Sample   | 4       | 40158017001 x3,,17750,BIOTA                  | - Oxfordingere  |
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| throughout the same of the sam |          | Method   |         | GEBIOTA2017<br>40158028005 x10,,17744,BIOTA  | -               |
|  | 106)     | RearSamp<br>Datafile   | 5       | 050318105                                    | 7               |
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|  | 107)     | Sample   | 6       | 40158017002 x3,,17750,BIOTA                  | T               |
|  |          | Datafile   |         | 050318106                                    | 1               |
|  | 1001     | Method   | 7       | GEBIOTA2017<br>40158028006 x6,,17744,BIOTA   | i               |
|  | 100)     | RearSamp<br>Datafile   | *       | 050318107                                    | +               |
| ***  |          | Method   |         | GEBIOTA2017                                  |                 |
|  | 109)     | Sample   | -8,     | 40158017016,,17750,BIOTA                     | -               |
| ***  |          | Datafile<br>Method   |         | 050318108<br>GEBIOTA2017                     |                 |
|  | 110)     | RearSamp   | 9       | 40158028007 x5,,17744,BIOTA                  | +               |
| ***************************************  | 220,     | Datafile   |         | 050318109                                    | -               |
|  |          | Method   | 1.0     | GEBIOTA2017<br>40158017017,,17750,BIOTA      |                 |
|  | 111)     | Sample<br>Datafile   | 1.0     | 050318110                                    | 1               |
|  |          | Method   |         | GEBIOTA2017                                  |                 |
|  | 112)     | RearSamp   | 11      | 40158028008 x5,,17744,BIOTA                  | -               |
| -  |          | Datafile   |         | 050318111<br>GEBIOTA2017                     | 1               |
|  | 1.1.33   | Method<br>Sample   | 12      | 40158017018,,17750,BIOTA                     | +               |
| 999  | 110,     | Datafile   |         | 050318112                                    | Ì               |
|  |          | Method   | - 4     | GEBIOTA2017                                  | T               |
| No. Womanows   | 114)     | RearSamp   | 13      | 40158028009 x5,,17744,BIOTA<br>050318113     | -               |
| -  |          | Datafile<br>Method   |         | GEBIOTA2017                                  | I               |
| New York   | 1151     | Sample   | 14      | 40158017019,,17750,BIOTA                     | 1               |
| and the state of t |          | Datafile   |         | 050318114                                    |                 |
|  | 1161     | Method   | 1.5     | GEBIOTA2017<br>40158028010 x5,,17744,BIOTA   | -               |
| and annual   | 110)     | RearSamp<br>Datafile   | ببند    | 050318115                                    |                 |
|  |          | Method   |         | GEBIOTA2017                                  | +               |
| Appen seems  | 117)     | Sample   | 16      | 40158017020,,17750,BIOTA                     |                 |
|  |          | Datafile<br>Method   |         | 050318116<br>GEB10TA2017                     | 1               |
|  | 118)     | RearSamp   | 17      | 40158028011 x4,,17744,BIOTA                  | -               |
|  |          | Datafile   |         | 050318117                                    | -               |
|  | 2101     | Method   | 10      | GEBIOTA2017<br>1681433,,17750,BIOTA          | 1               |
| ***  | 119)     | Sample<br>Datafile   | 18      | 050318118                                    |                 |
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|  | and the same of th | Method               |          | GEBIOTA20              | 17   |                 |  |                 |  |   |       | -                                       |  |   | ļ                                       | -  |
|  | 120)   | RearSamp             | 19       | 401580280              |  | 17744,BIG       | OTA  |                 |  |   |       | 200                                     |  | - Paragraphic                           |   |  |
|  |  | Datafile<br>Method   |          | 050318119<br>GEBIOTA20 |  |                 |  | نوة             |  |   |       |   | -Loanom                                |   |   |  |
|  | 121)   | Sample               | 20       | 401580290              |  | 17750,BIG       | ATC  |                 |  |   |       |   |  |   | ļ                                       |  |
|  |  | Datafile             |          | 050318120              |  |                 |  |                 |  |   |       | - income                                |  |   |   |  |
|  | 1221   | Method<br>RearSamp   | 21       | GEBIOTA20<br>401580280 |  | 7744,BIG        | ATC  |                 |  |   |       |   |  |   | <b></b>                                 |  |
|  |  | Datafile             |          | 050318121              |  |                 |  |                 |  |   |       |   |  |   |   |  |
|  | 100)   | Method<br>Sample     | 22       | GEBIOTA20<br>401580290 | 17<br>04 v51   | 17750.BIG       | ATC  |                 |  |   |       |   |  |   |   |  |
| <b> </b>   | 123)   | Datafile             | * Ku     | 050318122              |  |                 |  |                 |  |   |       | -+                                      |  |   |   |  |
|  | 104  | Method               | 2.2      | GEBIOTA20<br>1232-CCV, | 17   | 1 7762 3        | AR123 6  | w_              |  |   |       | *************************************** |  |   |   |  |
|  | 124)   | RearSamp<br>Datafile | 23       | 050318123              |  | ., 1 / / 02 , . |  |                 |  |   |       |   |  |   |   |  |
|  | -  | Method               |          | GEBIOTA20              | 17   |                 | n100   |                 |  |   |       |   |  |   |   |  |
|  | 125)   | Sample<br>Datafile   | 24       | 1232-CCV,<br>050318124 |  | 1,1/01,/        | 38123  |                 |  |   |       |   |  |   |   |  |
|  |  | Method               |          | GERTOTA20              | 17   |                 |  | 4.1             |  |   |       |   | -                                      | -                                       |   |  |
|  | 126)   | RearSamp             | 25       | 1232-CCV,<br>050318125 |  | 1,17762,        | AR123 (  | CN <sub>n</sub> |  |   |       |   |  |   |   |  |
|  |  | Datafile<br>Method   |          | GEBIOTA20              | 17   |                 |  |                 |  |   |       |   | 77.70                                  | 700                                     |   |  |
|  | 127)   | Sample               | 26       |                        |  | 1,17761,        | AR123  |                 |  |   |       |   |  |   |   |  |
|  |  | Datafile<br>Method   |          | 050318126<br>GEBIOTA20 | 1.7  |                 |  |                 |  |   |       | *************************************** |  | delalamen                               |   |  |
|  | 128)   | RearSamp             | 27       | 401580280              | 14 ×4,,3   | 7744,BIC        | ATC  |                 |  |   |       |   |  |   |   |  |
| <u> </u>   | -  | Datafile             |          | 050318127<br>GEBIOTA20 |  |                 |  |                 |  |   |       |   |  |   |   |  |
| de la constantina della constantina della consta | 1291   | Method<br>Sample     | 28       | 1681434 x              |  | ,BIOTA          |  |                 |  |   |       |   | 1                                      |   | 8                                       |  |
| 10.404   | 1  | Datafile             |          | 050318128              |  |                 |  |                 |  |   |       |   |  |   | +                                       |  |
|  | 1301   | Method<br>RearSamp   | 29       | GEBIOTA20<br>401580280 | 15 x3,,1   | 7744,BIG        | ATC  |                 |  |   |       |   |  |   |   |  |
|  | 15.07  | Datafile             |          | 050318129              |  |                 |  |                 |  |   |       | *************************************** |  | Sept.                                   | -                                       |  |
|  | 1211   | Method<br>Sample     | 3.0      | GEBIOTA20              | 1.7  |                 |  |                 |  |   |       | -                                       |  |   |   |  |
|  | 1,3,1)   | Datafile             | 30       | 050318130              |  |                 |  |                 |  |   |       |   |  |   |   |  |
|  |  | Method               | 2.7      | GEBIOTA20<br>1679888 x |  | ATOTA 1         |  |                 |  |   |       |   |  | 1                                       |   |  |
|  | 132)   | RearSamp<br>Datafile | 31       | 050318131              |  | 1,010.11        |  |                 |  |   |       |   |  |   |   |  |
|  |  | Method               | 1.       | GEBIOTA20              | 1.7  |                 |  |                 |  |   |       |   | 3                                      |   |   |  |
|  | 133)   | Sample<br>Datafile   | 32       | HEXANE<br>050318132    |  |                 |  |                 |  |   |       |   |  | -                                       |   |  |
|  |  | Method               |          | GEBIOTAZO              | 17   |                 |  |                 |  |   |       |   |  |   |   |  |
|  | 134)   | RearSamp<br>Datafile | 33       | 1679889 x<br>050318133 | 3,,1774.   | I, BIOTA        |  |                 |  |   |       | 1                                       | - Andrewson                            | *************************************** | -                                       |  |
| <b>*****</b>   | -  | Method               |          | GEBIOTA20              |  |                 |  |                 |  |   |       |   |  |   |   | -  |
|  | 135)   | Sample               | 34       | HEXANE<br>050318134    |  |                 |  |                 |  |   |       | ĺ                                       | A COLOR                                | 1                                       |   | 1  |
|  |  | Datafile<br>Method   |          | CERTOTA 20             | 17   |                 |  | -11             |  |   |       |   |  |   |   |  |
| *************************  | 136)   | RearSamp             | 35       | 1242-CCV,              |  | 1,17762,1       | AR124  | 04              |  |   |       |   | +                                      |   |   |  |
|  |  | Datafile<br>Method   |          | 050318135<br>GEBIOTA20 | 17   |                 |  |                 |  |   |       |   |  | 9                                       | *7 40,000,000                           | 1  |
|  | 137)   | Sample               | 36       | 1242-CCV,              | 185544:1   | 1,17761,        | AR124  |                 |  |   |       | 1                                       |  | 1                                       | -                                       |  |
|  |  | Datafile<br>Method   |          | 050318136<br>GEBIOTA20 | 17.7   |                 |  |                 |  |   |       |   | _                                      |   |   |  |
|  | 138)   | RearSamp             | 37       | 1242-CCV,              | 185544:  | 1,17762,        | AR124 0  | ×_              |  |   |       |   |  |   | a.companion                             |  |
|  | -  | Datafile<br>Method   |          | 050318137<br>GEBIOTA20 |  |                 |  |                 |  |   |       | _                                       | -                                      | -                                       |   |  |
|  | 139)   | Sample               | 38       | 1242-CCV,              | 185544:  | 1,17761,        | AR124  |                 |  |   |       |   |  | <u></u>                                 |   |  |
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|   |  | ***  | 2)                                      | Sample<br>Datafile                      |   | TIDAMIU                                 |                      |  |              |                           | JA.     |             |  |  |  | _         |
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|   |  | non.   | 0)                                      | Sample<br>Datafile                      |   |   | I                    |  |              |                           |         |             |  |  |  |           |
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|   |  | -  | 8)                                      | Sample<br>Datafile                      |   | 40137340-0                              | 01 11 4              |  |              |                           |         |             |  |  | _  |           |
| -                                       |  |  | 2.1                                     | Method                                  |   | SCREEN2014<br>40157940-00               | ns ×100              |  |              |                           |         |             |  |  |  |           |
|   |  |  | 9)                                      | RearSamp<br>Datafile                    |   | 40137940-00                             | 05 7                 |  |              |                           |         |             | _  | -  | -  | $\exists$ |
|   |  |  |   | Method                                  |   | SCREEN2014                              | ne v n               |  |              |                           |         |             |  |  |  |           |
|   |  |  | 10)                                     | Sample<br>Datafile                      | 10  | 40157940-00                             | ~ ~ 5                |  |              |                           |         |             | a) de la constante de la const | and the same of th |  | 1         |
|   |  | **   |   | Method                                  |   | SCREEN2014<br>40157940-00               | 07 8 3               |  |              |                           |         |             |  | _  |  |           |
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|   | -  |  |   | Method                                  |   | SCREEN2014<br>40157940-0                | 08 × 50              |  |              |                           |         |             |  |  |  |           |
|   |  | ~  | 12)                                     | Sample<br>Datafile                      |   |   | 00 A <b>aO</b>       |  |              |                           |         |             |  |  | -  | $\neg$    |
|   |  |  | 1 2 )                                   | Method                                  |   | SCREEN2014<br>40157940-0                | 09 ×15               |  |              |                           |         |             |  |  |  |           |
|   |  |  | 13)                                     | RearSamp<br>Datafile                    |   |   |                      |  |              |                           |         |             | ***************************************  | Aven division  |  |           |
|   | -  |  | 7.43                                    | Method                                  |   | SCREEN2014<br>40157940-0                | 10 410               |  |              |                           |         |             |  |  |  |           |
|   |  |  | 7.41                                    | Sample<br>Datafile                      |   |   |                      |  |              |                           |         |             |  |  |  |           |
|   | -  |  | 151                                     | Method<br>RearSamp                      | 15  | SCREEN2014<br>40157940-0                | 11 (10               |  |              |                           |         |             | ***************************************  |  | Water and Allen  | 9         |
|   |  | en.  | 1.0)                                    | Datafile                                |   |   | 1,0                  |  |              |                           |         |             |  | -  | 1  |           |
|   |  | ***  | 161                                     | Method<br>Sample                        |   | SCREEN2014<br>40157940-01               | 12 × 30              |  |              |                           |         |             |  |  | _  | _         |
|   | A MILES  |  | 20)                                     | Datafile                                |   |   | 30                   |  |              |                           |         |             | ele estate de la constanta de  |  | **************************************   |           |
|   |  | mar.   | 171                                     | Method<br>RearSamp                      |   | SCREEN2014<br>40157940-0                | 13 X 50              |  |              |                           |         |             | -  |  | 1  |           |
|   |  |  | 113                                     | Datafile                                |   |   |                      |  |              |                           |         |             |  | $\dashv$   | -  | _         |
|   | No. cancerson.   |  | 181                                     | Method<br>Sample                        | 18  | SCREEN2014<br>40157940-03               | 14 × 50              |  |              |                           |         |             | -  |  | and the same of th |           |
|   | _  |  | 10/                                     | Datafile                                |   |   |                      |  |              |                           |         |             | 1  |  | 1  |           |
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|          | 5)              | RearSamp                               | 5        | 40157940-015 * 20          |  |          |                 |  |   |          |
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|          | 6)              | Sample                                 | 6        | 1681430MS × 20             |  |          |                 | `  |   |          |
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|          | 8)              | Sample                                 |          | 40157948-008 <b>* 2</b>    |  |          |                 |  |   |          |
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|          | <del> </del> 9) | RearSamp                               | 9        | 40157948-009 <b>₹ 2</b>    |  |          |                 |  |   | -        |
|          |                 | Datafile<br>Method                     |          | SCREEN2014                 |  |          |                 |  | *************************************** |          |
|          | 10)             | Sample                                 | 10       | 40157948-011 410           |  |          |                 |  |   |          |
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|          | 12)             | Sample<br>Datafile                     |          | 40157948-014 × 5           |  |          |                 |  | -+                                      |          |
|          | <u> l</u>       | Method                                 |          | SCREEN2014                 |  |          |                 |  |   |          |
|          | 13)             | RearSamp<br>Datafile                   | 13       | 40158017-001 <b>&lt;</b> 3 |  |          |                 |  |   |          |
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|          | 14)             | Sample<br>Datafile                     | 14       | 40158017-002 🛂             |  |          |                 |  |   | _        |
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|          | + 15)           | RearSamp<br>Datafile                   | 15       | 40158017-016 -             |  |          |                 |  |   | $\dashv$ |
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|          | 16)             | Sample<br>Datafile                     | 16       | 40158017-017 -             |  |          |                 |  |   |          |
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|          | 17)             | RearSamp<br>Datafile                   |          | 10158017-018               |  |          |                 |  |   |          |
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|          | 18)             | Sample<br>Datafile                     |          | 10158017-019               |  |          |                 | -  |   | $\dashv$ |
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|          | 19)             | RearSamp<br>Datafile                   | 19 4     | 10158017-020               |  |          |                 |  | MANAGED PARTY                           |          |
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|  | 2) Sample            |                                | HEXANE                                  |   |              |              |  |   |              |  |
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|  | 3) Sample            | e 3                            | HEXANE                                  |   |              |              |  |   |              |  |
|  | Data:<br>Meth        | od                             | 042518003<br>GEBIOTA2017                |   |              |              |  |   |              |  |
|  | 4) Sampl             | e 4                            | 1248-CCV, 18<br>042518004               | 5549:1,1749   | 98, AR124    | ov.          |  | ***************************************   |              |  |
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|  | 5) Sample            | e 5                            | 1248-CCV, 18<br>042518005               | 5549:1,1749   | 98,AR124     | D/K          |  | **************************************  |              |  |
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|  | 6) Sample<br>Data    | -                              | 40158010001<br>042518006                | x6,,17723,  | BIOTA        |              |  |   |              |  |
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|  | 7) Sample<br>Data    |                                | 1677643,,17<br>042518007                | 730, BIOTA  | γ            |              |  |   |              |  |
|  | Meth                 |                                | GEBIOTA2017<br>1677644,,17              | 770 87087   | 115          |              |  |   | <b> </b>     |  |
|  | 8) Sample<br>Data    | e 8<br>file                    | 042518008                               | /30,B101A   | 007          |              |  | ************  | 1            |  |
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|  | 9) Sample<br>Data    |                                | 042518009                               | X3,,17730   | D10111       |              |  | ***************************************   |              |  |
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|  | 10) Sampli<br>Data:  |                                | 042518010                               | NI GOY PARTY  |              |              |  |   |              |  |
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|  | Methors 14) Sample   |                                | 40157940006                             |   | BIOTA        |              |  |   | TOTAL STREET |  |
|  | Data<br>Meth         | od                             | 042518014<br>GEBIOTA2017                |   |              |              |  |   |              |  |
|  | 15) Sample           | e 15                           | 40157940007                             | x2,,17730   | BIOTA        |              |  | *************   | -            |  |
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|  | 16) Sample           | e 16                           | 1254-CCV, 18                            | 5554:1,1749   | 98,AR125     | 0/5          |  | onto a constantina  |              |  |
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|  | 17) Sample           | e 17                           | 1254-CCV, 18<br>042518017               | 5554:1,174  | 98,AR125     | ,            |  |   |              |  |
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|  | 19) Sample<br>Data   |                                | 40157940009<br>042518019                | X10,,1113   | J, DIVIN     |              |  | ***************************************   |              |  |
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| ļ       |              | 22)  | Meth<br>Samp                            |      | 2             | 22       | 40157940012 x30,,17730,BIOTA                    |                       |   |     |
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|         |              | 231  | Samp.                                   |      |               |          | 042518023                                       |                       |   |     |
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|         | -            | 24)  | Samp.                                   |      |               | ≥ 4      | 40157940014 x50,,17730,BIOTA<br>042518024       |                       |   | +   |
|         |              |  | Meth                                    |      |               |          | GEBIOTA2017                                     |                       |   |     |
|         |              | 25)  | Samp.                                   | le   |               | 25       | 40157940016 x20,,17730,BIOTA                    |                       |   |     |
|         |              |  | Data<br>Meth                            |      | e             |          | 042518025<br>GEBIOTA2017                        |                       |   |     |
|         |              | 26)  | Samp.                                   |      | 2             | 26       | 40157940017 x20,,17730,BIOTA                    |                       |   |     |
|         | _            | •  | Data                                    | afil |               |          | 042518026                                       | -                     |   | +   |
|         |              | 271  | Meti<br>Samp                            |      |               | 27       | GEBIOTA2017<br>40157940018 x5,,17730,BIOTA      |                       |   |     |
|         | _            | 21)  | Data                                    |      |               | •        | 042518027                                       |                       |   |     |
|         |              |  | Metl                                    |      |               | 3.0      | GEBIOTA2017<br>1660-CCV,185559:1,17498,AR166 OV | _                     |   |     |
|         |              | 28)  | Samp.                                   |      |               | 28       | 042518028                                       |                       |   |     |
|         |              |  | Met                                     |      |               |          | GERIOTA 2017                                    | -                     |   |     |
|         |              | 29)  | Samp.                                   |      |               | 29       |   |                       |   |     |
| -       |              |  | Data<br>Metl                            |      |               |          | 042518029                                       |                       |   |     |
|         |              | 30)  | Samp.                                   |      | 3             | 30       | 40157940019 x30,,17730,BIOTA                    |                       |   |     |
|         | -            |  | Dat                                     |      | e             |          | 042518030                                       |                       |   |     |
|         |              | 311  | Met!<br>Samp                            |      | 5             | 3.1      | GEBIOTA2017<br>40157940020 x4,,17730,BIOTA      |                       |   |     |
|         |              | 71,  | Data                                    |      |               | -        | 042518031                                       |                       |   |     |
|         |              |  | Metl                                    |      | _             | 2.0      | GEBIOTA2017<br>40158013010 x10,,17730,BTOTA     |                       |   |     |
|         |              | 32)  | Samp.                                   |      |               | 32       | 042518032                                       |                       |   |     |
|         |              |  | Met                                     |      |               |          | GEBIOTA2017                                     |                       |   |     |
|         |              | 33)  | Samp                                    |      |               | 33       | 1677645 x10,,17730,BIOTA<br>042518033           | +-+                   |   |     |
|         |              |  | Data<br>Met                             |      | .e            |          | GEBIOTA2017                                     |                       |   |     |
|         |              | 34)  | Samp                                    |      | :             | 34       | 1677646 x10,,17730,BIOTA                        |                       |   |     |
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|         |              | 351  | Met<br>Samp                             |      | 3             | 35       | 1221-CCV, 185538:1, 17498, AR122                |                       |   |     |
|         |              | ,  | Dat                                     |      |               |          | 042518035                                       |                       |   |     |
|         |              | 261  | Met                                     |      |               | 36       | GEBIOTA2017<br>1221-CCV,185538:1,17498,AR122    |                       |   |     |
|         |              | 301  | Samp.                                   |      |               | 30       | 042518036                                       |                       |   |     |
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|  | 7) Sample 7: 40158023009 x7,,17733,BIOTA   |   |  | 1  |
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|  | 9) Sample 9 40158023014 x6,,17733,BIOTA  |   |  |  |
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|  | 11) Sample 11 1679051,,17738,BIOTA   |   |  |  |
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| Page 1   | Method GEBIOTA2017   |   | -  |  |
|  | 13) Sample 13 40158025002 x2,,17738,BIOTA  |   |  | -  |
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|  | 19) Sample 19 40158025007,,17738,BIOTA 25  |   |  |  |
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|  | -  | 6.)  | Sample                    | 6        | 1681428,,177  | 750, BIOTA   |   |  |                 | .  |   | 4            |
|  | i i i i i i i i i i i i i i i i i i i  |      | Datafile<br>Method        |          | 050718006<br>GEBIOTA2017  |  |   |  |                 |  |   | I            |
|  |  | 7)   | Sample                    | 7        | 1681429,,17   | 750, BIOTA   | 72                                      |  |                 | 1  | -                                       | 1            |
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|  |  |      | Method                    |          |   |  | m S                                     |  |                 |  |   | ı            |
|  |  | 91)  | Sample                    | 9        | GEBIOTA2017<br>1681430 x20,<br>050718009  | ,,17750,BIOT   | A. III                                  |  |                 |  |   | 4            |
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|  |  | 11)  | Sample                    | 11       | 40157948008<br>050718011  | x2,,17750,B  | TOTA                                    |  |                 | ***************************************  |   |              |
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|  |  | 12)  | Sample                    | 1.2      | 40157948009   | x2,,17750,B  | IOTA                                    |  |                 |  |   | 4            |
| -  |  |      | Datafile                  |          | 050718012   |  |   |  |                 | ***  | verse state                             |              |
|  |  | 431  | Method<br>Sample          | 1 2      | GEBIOTA2017<br>40157948011  | ×10 17750.   | BIOTA                                   |  |                 |  |   | -            |
| į  | National Section 1   | 13)  | Datafile                  | 7.7      | 050718013   | X10,,1,,00,  | 272 3 3 7 7                             |  |                 |  |   | 1            |
|  | +  |      | Method                    |          | GEBIOTA2017   |  | _                                       |  |                 | -  |   | 1            |
|  |  | 14)  | Sample                    | 1.4      | 1681432 x10,  | ,17750,BIOT  | A                                       |  |                 |  |   | Г            |
|  |  |      | Datafile<br>Method        |          | 050718014<br>GEBIOTA2017  |  |   |  |                 |  |   | 1            |
|  |  | 15)  | Sample                    | 15       | 40157948014   | x5,,17750,B  | IOTA                                    |  |                 |  |   |              |
|  |  | - 7  | Datafile                  |          | 050718015   |  |   |  |                 |  |   |              |
|  | -  | 7.5  | Method                    | 16       | GEBIOTA2017<br>1254-CCV,185   | 554 - 1 17762  | AR125 04                                |  |                 | 1  |   | -            |
|  |  | 70)  | Sample<br>Datafile        | Τρ       | 050718016   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |                 |  | 1                                       |              |
|  | -  |      | Method                    |          | GERTOTA2017   |  |   |  |                 | ++   |   | 1            |
| Participa de la constitución de  | 1  | 17)  | Sample                    | 17       | 1254-CCV, 185   | 5554:1,17762   | , AR125 OV                              |  |                 | nanyahahaa   | AUTO SERVICE                            | I            |
|  | 1.   |      | Datafile<br>Method        |          | 050718017<br>GEBIOTA2017  |  | .=                                      |  |                 | 1  |   | 1            |
|  | 1  | 18)  | Sample                    | 18       | 40158017001   | x3,,17750,B  | 10TA <b>95</b>                          |  |                 | Marie and an   | *************************************** | 1            |
| The state of the s | 1  |      | Datafile                  |          | 050718018   |  |   |  |                 |  |   |              |
|  | ┙ '  | J    | Method                    | 10       | GEBIOTA2017<br>40158017002  | v3 17750 B   | TOTA                                    |  |                 |  |   | -            |
| ***************************************  | ***************************************  | * 2) | Sample<br>Datafile        | 13       | 050718019   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |   |  |                 |  | TO THE PERSON NAMED IN COLUMN 1         |              |
|  | -  | 1    |                           |          |   |  |   |  | Page: 1         | -  |   | -            |
| ***  |  |      | Last Modifie              | ed: Mon  | May 07 12:20  | 0:59 2018  |   |  | rage. 1         | Andreas (in)   |   |              |
|  | 1  | 1    | 1 1. 1                    |          |   | { 1 1 i  | 1 1 1                                   |  | 5/10/16 MI      | 2 ++   | _                                       | 1            |
|  |  |      |                           |          |   |  |   | -  | JIIO            | 7  | -                                       |              |
|  |  |      |                           |          |   |  |   |  | Continued on Da | an A-  |   |              |
|  |  |      |                           |          |   |  |   |  | Continued on Pa | ge 87  |   | -            |
|  |  |      |                           |          |   |  |   |  |                 |  |   | and the same |
|  |  |      |                           |          |   | Read   | and Understoo                           | od By  |                 |  |   |              |
|  |  | _    | ~ A                       | Λ        |   |  | ,                                       |  |                 |  |   | -            |
| 13   | 1.0  | . 1. | )), /                     | IJ       | =11-1.  |  | 1. 6                                    | 2  |                 | 5-112-1  | 0                                       |              |
| $\neg \bigcirc$  | me   |      | · un                      | 4-       | 5/10/18   | 5  | Hun O                                   | 1 Um   | ma 5            | . 10-1   | 0                                       |              |
|  |  |      | Signed                    | <i>l</i> | Date  |  | S                                       | igned  |                 | Date   |   | -            |
|  | -  | -    |                           | A        |   |  |   |  |                 |  |   | ,            |

#### Batch Information: OEXT 286769 PCB-B

| Prep Method         | EPA 3541     |  |
|---------------------|--------------|--|
| Spiked By           | ETB          |  |
| Instrument          | 40BALL       |  |
| Hexane/Acetone 1:1  | 194588       |  |
| 3620B Date/Initials | 04/25/18 ETB |  |
| Reviewed By         | BLM          |  |

| Analysis Method     | EPA 8082A Mod           |
|---------------------|-------------------------|
| Spiked By Date/Time | 04/24/2018 07:41:03:682 |
| Conc. Temp #1       | 40                      |
| Hexane              | 192551                  |
| H2SO4 - Conc.       | 179362                  |
| Reviewed By Date    | 04/27/2018 07:35        |

### Template Version: F-GB-O-113-Rev.05 (22Mar2018)

| Extracted By                | ЕТВ          |  |
|-----------------------------|--------------|--|
| Witnessed By                | AMC          |  |
| Conc. Temp #2               | 40           |  |
| Sodium Sulfate              | 194085       |  |
| Acid 3665A<br>Date/Initials | 04/25/18 ETB |  |
| Batch Notes                 |              |  |

| Extracted Date/Time       | 04/24/2018 07:41:00:500 |
|---------------------------|-------------------------|
| Witnessed By<br>Date/Time | 04/24/2018 07:41:03:682 |
| Methylene Chloride        | None Added              |
| Florisil                  | 186910                  |
| Tuna                      | None Added              |
| NUES SE                   |                         |

#### Sample Information:

| Sample Into | mation.     |               |                   |                      |                          |              |                 |                    |
|-------------|-------------|---------------|-------------------|----------------------|--------------------------|--------------|-----------------|--------------------|
| OC Rule     | Sample Type | Lab Sample ID | nitial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)    | AR1242-SPK<br>(mL) |
| 8082A TNYP  | BLANK       | 1677643       | 10                | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | LCS         | 1677644       | 10                | 5                    | 3                        |              | 193230<br>(.25) | 192096<br>(.125)   |
| 8082A TNYP  | PS          | 40157940001   | 10.0188           | 5                    | 3                        |              | 193230<br>(.25) | (12.2.3)           |
| 8082A TNYP  | PS          | 40157940002   | 9.9797            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940003   | 10.0286           | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940004   | 8.0409            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940005   | 9.9876            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940006   | 9.9653            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940007   | 9.7076            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940008   | 7.2184            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940009   | 7.2222            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940010   | 9.9632            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940011   | 5.5479            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940012   | 9.9742            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP  | PS          | 40157940013   | 9.0096            | 5                    | 3                        |              | 193230          |                    |
| 8082A TNYP  | PS          | 40157940014   | 10.0106           | 5                    | 3                        |              | 193230 (.25)    |                    |

Mon, 14 May 2018 15:04:57 -0500

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# Pace Analytical Prep Log Report

| 40157940  | OC Rule    | Sample Type | Lab Sample ID | Initial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)    | AR1242-SPK<br>(mL) |
|---|------------|-------------|---------------|--------------------|----------------------|--------------------------|--------------|-----------------|--------------------|
|   | 8082A TNYP | PS          | 40157940016   | 9.9908             | 5                    | 3                        |              | 193230<br>(.25) |                    |
|   | 8082A TNYP | PS          | 40157940017   | 10.0261            | 5                    | 3                        |              | 193230<br>(.25) |                    |
|   | 8082A TNYP | PS          | 40157940018   | 10.0128            | 5                    | 3                        |              | 193230<br>(.25) |                    |
|   | 8082A TNYP | PS          | 40157940019   | 10.0081            | 5                    | 3                        |              | 193230<br>(.25) |                    |
|   | 8082A TNYP | PS          | 40157940020   | 9.9998             | 5                    | 3                        |              | 193230<br>(.25) |                    |
|   | 8082A TNYP | RQS         | 40158013010   | 5.5162             | 5                    | 3                        |              | 193230<br>(.25) |                    |
|   | 8082A TNYP | MS          | 1677645       | 8.1647             | 5                    | 3                        | -            | 193230<br>(.25) | 192096<br>(.125)   |
| 7   | 8082A TNYP | DUP         | 1677646       | 8.8754             | 5                    | 3                        |              | 193230<br>(.25) | (.120)             |
| (.25)  Standard Notes:  192096: Ar1242 Spike @20ug/mL 40GCS9.  193230: Pest/PCB Surrogate Spike 40GCSC. |            |             |               |                    |                      |                          |              |                 |                    |

### Pace Analytical Prep Log Report

#### Batch Information: OEXT 287324 PCB-B

| Prep Method         | EPA 3541     |
|---------------------|--------------|
| Spiked By           | ETB          |
| Instrument          | 40BALL       |
| Hexane/Acetone 1:1  | 195058       |
| 3620B Date/Initials | 05/01/18 ETB |
| Reviewed By         | BLM          |

| Analysis Method     | EPA 8082A Mod           |
|---------------------|-------------------------|
| Spiked By Date/Time | 04/30/2018 10:28:43:480 |
| Conc. Temp #1       | 40                      |
| Hexane              | 192551                  |
| H2SO4 - Conc.       | 179362                  |
| Reviewed By Date    | 05/10/2018 14:00        |
|                     |                         |

#### Template Version: F-GB-O-113-Rev.05 (22Mar2018)

| Extracted By                | ETB          |
|-----------------------------|--------------|
| Witnessed By                | AMC          |
| Conc. Temp #2               | 40           |
| Sodium Sulfate              | 194642       |
| Acid 3665A<br>Date/Initials | 05/01/18 ETB |
| Batch Notes                 |              |

| ` '                       |                         |
|---------------------------|-------------------------|
| Extracted Date/Time       | 04/30/2018 10:28:43:480 |
| Witnessed By<br>Date/Time | 04/30/2018 10:28:43:480 |
| Methylene Chloride        | None Added              |
| Florisil                  | 186910                  |
| Tuna                      | None Added              |
|                           |                         |

### Sample Information:

| •                                      |             |               | =                 |                      |                          |              |                 |                     |
|--|-------------|---------------|-------------------|----------------------|--------------------------|--------------|-----------------|---------------------|
| QC Rule                                | Sample Type | Lab Sample ID | nitial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL)    | AR1242-SPK<br>(mL.) |
| 8082A TNYP                             | BLANK       | 1681428       | 10                | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | LCS         | 1681429       | 10                | 5                    | 3                        |              | 193230<br>(.25) | 192096<br>(.125)    |
| 8082A TNYP                             | RQS         | 40157940015   | 9.9936            | 5                    | 3                        |              | 193230<br>(.25) | (.123)              |
| 8082A TNYP<br>8082A TNYP<br>8082A TNYP | DUP         | 1681911       | 9.9851            | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | MS          | 1681430       | 9.9846            | 5                    | 3                        |              | 193230<br>(.25) | 192096<br>(.125)    |
| 8082A TNYP                             | PS          | 40157948008   | 10.0142           | 5                    | 3                        |              | 193230<br>(.25) | (.120)              |
| 8082A TNYP                             | PS          | 40157948009   | 10.0164           | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | RQS         | 40157948011   | 10.0294           | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | DUP         | 1681432       | 10.0332           | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40157948014   | 10.0131           | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40158017001   | 9.9702            | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40158017002   | 9.9957            | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40158017016   | 9.9898            | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40158017017   | 10.0147           | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40158017018   | 10.0284           | 5                    | 3                        |              | 193230<br>(.25) |                     |
| 8082A TNYP                             | PS          | 40158017019   | 10.0003           | 5                    | 3                        |              | 193230<br>(.25) |                     |

Mon, 14 May 2018 15:05:05 -0500

702 of 859

# Pace Analytical Prep Log Report

| QC Rule    | Sample Type | Lab Sample ID | initial Weight (g) | Final Volume<br>(mL) | Volume<br>Delivered (mL) | Sample Notes | 8081-SS (mL.)   | AR1242-SPK<br>(mL) |
|------------|-------------|---------------|--------------------|----------------------|--------------------------|--------------|-----------------|--------------------|
| 8082A TNYP | RQS         | 40158017020   | 10.002             | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP | DUP         | 1681433       | 10.0261            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP | PS          | 40158029002   | 9.985              | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP | RQS         | 40158029004   | 10.0264            | 5                    | 3                        |              | 193230<br>(.25) |                    |
| 8082A TNYP | DUP         | 1681434       | 10.0092            | 5                    | 3                        |              | 193230<br>(.25) |                    |

#### **Standard Notes:**

192096: Ar1242 Spike @20ug/mL 40GCS9.

193230: Pest/PCB Surrogate Spike 40GCSC.

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

| - |                       |
|---|-----------------------|
| _ | 05 470000 04 DICOD 00 |
| ı | 05-170828-01-PKSD-02  |
| • |                       |

 Lab Name:
 Pace Analytical - Green Bay
 SDG No. : 40157940
 Contract:
 HUDSON RIVER REMEDIAL

 Lab Sample ID:
 40157940001
 Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 2.1           |   | %     | 1  | 04/25/2018 08:49   |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170828-01-PKSD-05

Lab Name:Pace Analytical - Green BaySDG No. : 40157940Contract:HUDSON RIVER REMEDIALLab Sample ID:40157940002Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.6           |   | %     | 1  | 04/25/2018 08:49   |
|         |         |               |   |       |    |                    |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170828-01-PKSD-04

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|---------------------------------|
| Lab Sample ID: 40157940003            |                   | Percent Moisture:               |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |  |
|---------|---------|---------------|---|-------|----|--------------------|--|
|         | Lipid   | 3.2           |   | %     | 1  | 04/25/2018 08:49   |  |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170828-01-PKSD-03

Lab Name: Pace Analytical - Green Bay SDG No.: 40157940 Contract: HUDSON RIVER REMEDIAL
Lab Sample ID: 40157940004 Percent Moisture:

| CAS No. |       | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|-------|---------|---------------|---|-------|----|--------------------|
|         | Lipid |         | 2.2           |   | %     | 1  | 04/25/2018 08:49   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD3-170828-01-PKSD-02

| Lab Name: Pace | Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|----------------|------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: | 40157940005            |                   | Percent M | oisture:              |

| CAS No | . Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|--------|-----------|---------------|---|-------|----|--------------------|
|        | Lipid     | 3.4           |   | %     | 1  | 04/25/2018 08:50   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

| TD2-170828-01- | PKSD-02 |  |
|----------------|---------|--|

| Lab Name: Pace Anal | ytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------|--------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 4015 | 7940006            | -                 | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 2.7           |   | %     | 1  | 04/25/2018 08:50   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

| TD2-170828-01-PKSD-01  |  |
|------------------------|--|
| 1D2-170020-01-1 NOD-01 |  |

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40157940007            |                   | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 2.2           |   | %     | 1  | 04/25/2018 08:50   |



# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

|       |                 | _ |
|-------|-----------------|---|
| D1-17 | 0828-01-PKSD-05 | ) |

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|---------------------------------|
| Lab Sample ID: 40157940008            |                   | Percent Moisture:               |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.9           |   | %     | 1  | 04/25/2018 08:50   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

|          |       |          | _ |
|----------|-------|----------|---|
| ΓD1-1708 | 28-01 | -PKSD-04 |   |

| Lab Name: Pace | e Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|----------------|--------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: | 40157940009              | -                 | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.7           |   | %     | 1  | 04/25/2018 08:50   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

|  | 28-01-PKSD-0 | )3 |
|--|--------------|----|
|--|--------------|----|

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40157940010            |                   | Percent M | loisture:             |

| CAS No. |       | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|-------|---------|---------------|---|-------|----|--------------------|
|         | Lipid |         | 3.0           |   | %     | 1  | 04/25/2018 08:50   |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

TD1-170828-01-PKSD-02

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | <b>HUDSO</b> | N RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|--------------|------------------|
| Lab Sample ID: 40157940011            | _                 | Percent M | oisture:     |                  |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.4           |   | %     | 1  | 04/25/2018 08:51   |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND2-170828-01-PKSD-04

| Lab Name: Pace Analyti | cal - Green Bay | SDG No.: 40157940 | Contract:  | HUDSON RIVER REMEDIAL |
|------------------------|-----------------|-------------------|------------|-----------------------|
| Lab Sample ID: 401579  | 40012           |                   | Percent Me | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.6           |   | %     | 1  | 04/25/2018 08:51   |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND2-170828-01-PKSD-03

| Lab Name: Pace | Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|----------------|------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: | 40157940013            | -                 | Percent M | oisture:              |

| CAS No. |       | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|-------|---------|---------------|---|-------|----|--------------------|
|         | Lipid |         | 4.0           |   | %     | 1  | 04/25/2018 08:51   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND2-170828-01-PKSD-02

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40157940014            |                   | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.1           |   | %     | 1  | 04/25/2018 08:51   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40157940015            | _                 | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 3.7 V         |   | %     | 1  | 04/30/2018 14:40   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND1-170828-01-PKSD-06

| Lab Name: Pace | Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|----------------|------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: | 40157940016            | -                 | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |  |
|---------|---------|---------------|---|-------|----|--------------------|--|
|         | Lipid   | 3.3           |   | %     | 1  | 04/25/2018 08:52   |  |

05/14/2018 15:06

843 of 859

40157940

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND1-170828-01-PKSD-05

Lab Name: Pace Analytical - Green Bay SDG No.: 40157940 Contract: HUDSON RIVER REMEDIAL
Lab Sample ID: 40157940017 Percent Moisture:

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 4.6           |   | %     | 1  | 04/25/2018 08:52   |



# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND1-170828-01-PKSD-03

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40157940018            |                   | Percent M | oisture:              |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 2.9 🗸         |   | %     | 1  | 04/25/2018 08:52   |

# FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

ND1-170828-01-PKSD-02

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|-----------|-----------------------|
| Lab Sample ID: 40157940019            |                   | Percent M | loisture:             |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |  |
|---------|---------|---------------|---|-------|----|--------------------|--|
|         | Lipid   | 3.7           |   | %     | 1  | 04/25/2018 08:52   |  |

### FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

| ND1-170828-01-PKSD-01 |  |
|-----------------------|--|

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940 | Contract: HUDSON RIVER REMEDIAL |
|---------------------------------------|-------------------|---------------------------------|
| Lab Sample ID: 40157940020            |                   | Percent Moisture:               |

| CAS No. | Analyte | Concentration | Q | Units | DF | Analysis Date/Time |
|---------|---------|---------------|---|-------|----|--------------------|
|         | Lipid   | 2.0           |   | %     | 1  | 04/25/2018 08:52   |

05/14/2018 15:06

40157940 847 of 859

### FORM III INORGANIC-1 BLANKS

| Lab Name: Pace Analytical - Gre | een BaySD0                      | G No. : <u>40157940</u> | Contract : H     | UDSON RIVE  | R REMEDIA | L ACTION M  |    |
|---------------------------------|---------------------------------|-------------------------|------------------|-------------|-----------|-------------|----|
| Method Blank Matrix: Tissue     |                                 | Instrum                 | ent ID: 40BALI   | <del></del> | _         |             |    |
| Method Blank Concentration Unit | s: <u>%</u>                     | <del></del>             |                  |             |           |             |    |
| Analyte                         | Initial<br>Calibration<br>Blank | C                       | ontinuing Calibr | ation Blank |           | Method Blar | nk |
|                                 | С                               |                         | С                | С           | С         | 1678322     | С  |



< 0.030

U

Lipid

### FORM III INORGANIC-1 BLANKS

| Lab Name: Pace Anal  | ytical - Gre  | en Bay S                        | DG | No. : <u>4015794</u> | 0    | Contract: HUD      | so  | N RIVER REMEDIA | AL A | CTION M     |   |
|----------------------|---------------|---------------------------------|----|----------------------|------|--------------------|-----|-----------------|------|-------------|---|
| Method Blank Matrix: | Tissue        |                                 |    | Instrum              | nent | ID: 40BALL         |     |                 |      |             |   |
| Method Blank Concent | tration Units | s: <u>%</u>                     |    |                      |      |                    |     |                 |      |             |   |
| Analyte              |               | Initial<br>Calibration<br>Blank |    | (                    | Conf | tinuing Calibratio | n E | 3lank           | М    | ethod Blank | ( |
|                      |               |                                 | С  |                      | С    |                    | С   | С               | 1    | 681739      | С |
| Lipid                |               |                                 |    | -                    |      |                    |     |                 |      | <0.030      | U |



### FORM VI INORGANIC-1 DUPLICATES

SAMPLE NO.

1678325DUP

| Lab Name: Pace Analytical - Green Bay | SDG No. : 40157940     | Contract: | HUDSON RIVER REMEDIAL |
|---------------------------------------|------------------------|-----------|-----------------------|
| Matrix: <u>Tissue</u>                 | Concentration Units: % |           |                       |
| Percent Moisture:                     | Basis: Wet             |           |                       |
|                                       |                        |           |                       |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 4.0    | 2.3       | 53* |

Man SDG Parent

40157940

### FORM VI INORGANIC-1 DUPLICATES

| SAMPLE NO. |  |
|------------|--|
| 1681741DUP |  |

| Lab Name:  | Pace Analytical - Green Bay | SDG No. : 4   | 10157940           | Contract: | HUDSON F | RIVER REMEDIAL |
|------------|-----------------------------|---------------|--------------------|-----------|----------|----------------|
| Matrix:    | Tissue                      | Concentration | on Units: <u>%</u> |           |          |                |
| Percent Mo | pisture:                    | Basis: Wet    |                    |           |          |                |
|            | Anglyto                     | Control       | Sampla             | Dunlicato | PPD      |                |

| Analyte | Control<br>Limit | Sample Duplicate |     | RPD |
|---------|------------------|------------------|-----|-----|
| Lipid   | 40               | 3.7              | 3.7 | 1   |
|         |                  |                  |     |     |

### FORM VI INORGANIC-2 DUPLICATES

| 1681743DUP |  |
|------------|--|
| 1001743006 |  |

| Lab Name:  | Pace Analytical - Green Bay | SDG No.: 40157940      | Contract: | HUDSON RIVER REMEDIAL |
|------------|-----------------------------|------------------------|-----------|-----------------------|
| Matrix:    | Tissue                      | Concentration Units: % |           |                       |
| Percent Mo | sisture:                    | Basis: Wet             |           |                       |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 2.7    | 2.8       | 6   |

# FORM VI INORGANIC-3 DUPLICATES

1681744DUP

| Lab Name:  | Pace Analytical - Green Bay | SDG No.: 40157940      | Contract: | HUDSON RIVER REMEDIAL |
|------------|-----------------------------|------------------------|-----------|-----------------------|
| Matrix:    | Tissue                      | Concentration Units: % |           |                       |
| Percent Mo | isture:                     | Basis: Wet             |           |                       |
|            |                             |                        |           |                       |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 2.9    | 2.6       | 9   |



### FORM VI INORGANIC-4 DUPLICATES

| SAMPLE NO. |  |
|------------|--|
| 1691745DUD |  |

| Lab Name: Pace Analytical - Green Bay | SDG No.: 40157940      | Contract: HUDSON RIVER REMEDIAL |
|---------------------------------------|------------------------|---------------------------------|
| Matrix: Tissue                        | Concentration Units: % |                                 |
| Percent Moisture:                     | Basis: Wet             |                                 |
|                                       | Control                |                                 |

| Analyte | Control<br>Limit | Sample | Duplicate | RPD |
|---------|------------------|--------|-----------|-----|
| Lipid   | 40               | 3.5    | 3.7       | 4   |

Batch Information: OEXT 286925 LIPIDS

### Template Version: F-GB-O-145-Rev.01 (22Mar2018) LIPID

| 4   | Analysis Method Pace Lipid | Analyzed By ETB                   | Înstrument 40BALL | Batch Notes |
|-----|----------------------------|-----------------------------------|-------------------|-------------|
| 015 | Reviewed By BLM            | Reviewed By Date 05/03/2018 12:21 |                   |             |
| 794 | Sample Information:        |                                   |                   |             |
| 0   |                            |                                   |                   |             |

|         | Ъе          | e ID         |        | Posted                        |             | eight                | Volume            | 2            | ht (g)          | t.1 (g)          | 0<br>1-    | otes :       |
|---------|-------------|--------------|--------|-------------------------------|-------------|----------------------|-------------------|--------------|-----------------|------------------|------------|--------------|
| DC Rule | Sample Type | ab Sample ID | Select | Lipid % Posted                | Q           | Sample Weight<br>(g) | Sample Vo<br>(mL) | Aliquot (mL) | Dish Weight (g) | Ory Weight 1 (g) | Dry Wt Use | Sample Notes |
| LIPID   | BLANK       | 1678322      | Y      | 0.02000 04/25/2               | 2018        | 10                   | 5                 | 1            | 0.9293          | 0.9297           | М          | 1677643      |
| LIPID   | BLANK       | 1678323      | Y      | 0.01000 04/25/3               | 2018        | 10                   | 5                 | 1            | 0.9298          | 0.93             | М          | 1677644      |
| LIPID   | PS          | 40157940001  | Y      | 2.051 04/25/3                 | 2018        | 10.0188              | 5                 | 1            | 0.9293          | 0.9704           | М          |              |
| LIPID   | PS          | 40157940002  | Y      | 3.612 04/25/3                 |             | 9.9797               | 5                 | 1            | 0.9307          | 1.0028           | М          |              |
| LIPID   | PS          | 40157940003  | Y      | 3.161 04/25/3                 | 2018<br>:43 | 10.0286              | 5                 | 1            | 0.9304          | 0.9938           | М          |              |
| LIPID   | PS          | 40157940004  | Y      | 2.220 04/25/<br>08:49         | 2018        | 8.0409               | 5                 | 1            | 0.9306          | 0.9663           | М          |              |
| LIPID   | PS          | 40157940005  | Y      | 3.389 04/25/<br>08:50         |             | 9.9876               | 5                 | 1            | 0.928           | 0.9957           | М          |              |
| LIPID   | PS          | 40157940006  | Y      | 2.704 <b>9</b> 4/25/<br>08:50 |             | 9.9653               | 5                 | 1            | 0.929           | 0.9829           | М          |              |
| LIPID   | PS          | 40157940007  | Y      | 2.240 04/25/<br>08:50         |             | 9.7076               | 5                 | 1            | 0.9285          | 0.972            | М          |              |
| LIPID   | PS          | 40157940008  | Y      | 3.865 04/25/<br>08:50         |             | 7.2184               | 5                 | 1            | 0.9292          | 0.985            | М          |              |
| LIPID   | PS          | 40157940009  | Y      | 3.732 04/25/<br>08:50         |             | 7.2222               | 5                 | 1            | 0.9253          | 0.9792           | М          |              |
| LIPID   | PS          | 40157940010  | Y      | 2.961 04/25/<br>08:50         | 2018        | 9.9632               | 5                 | 1            | 0.9291          | 0.9881           | М          |              |
| LIPID   | PS          | 40157940011  | Y      | 3.425 08:51                   | 2018        | 5.5479               | 5                 | 1            | 0.9293          | 0.9673           | М          |              |
| LIPID   | PS          | 40157940012  | Y      | 3.584 04/25/<br>08:51         |             | 9.9742               | 5                 | 1            | 0.9333          | 1.0048           | М          |              |
| LIPID   | PS          | 40157940013  | Y      | 3.962 04/25/<br>08:51         | 2018        | 9.0096               | 5                 | 1            | 0.9284          | 0.9998           | М          |              |
| LIPID   | PS          | 40157940014  | Y      | 3.097 04/25/<br>08:51         | 2018        | 10.0106              | 5                 | 1            | 0.9271          | 0.9891           | М          |              |
| LIPID   | PS          | 40157940016  | Y      | 3.288 04/25/<br>08:52         | ::01        | 9.9908               | 5                 | 1            | 0.9315          | 0.9972           | М          |              |
| LIPID   | PS          | 40157940017  | Y      | 4.578 04/25/<br>08:52         | 2018        | 10.0261              | 5                 | 1            | 0.9234          | 1.0152           | М          |              |
| LIPID   | PS          | 40157940018  | Y      | 2.896 04/25/<br>08:52         |             | 10.0128              | 5                 | 1            | 0.9269          | 0.9849           | М          |              |

| Pace Analytical* Pre | ep Lo | og R | eport |
|----------------------|-------|------|-------|
|----------------------|-------|------|-------|

| QC Rule | Sample Type | Lab Sample ID | Select | Lipid % Posted | Run Date/Time          | 0) | Sample Weight<br>(9) | Sample Volume<br>(mL) | Aliquot (mL) | Dish Weight (g) | Dry Weight 1 (g) | Dry Wit Use 1 | Sample Notes |
|---------|-------------|---------------|--------|----------------|------------------------|----|----------------------|-----------------------|--------------|-----------------|------------------|---------------|--------------|
| LIPID   | PS          | 40157940019   | Y      | 3.717          | 04/25/2018             |    | 10.0081              | 5                     | 1            | 0.9318          | 1.0062           | М             |              |
| LIPID   | PS          | 40157940020   | Y      | 1.970 🔪        | 04/25/2018<br>08:52:44 |    | 9.9998               | 5                     | 1            | 0.9308          | 0.9702           | М             |              |
| LIPID   | RQS (       | 40158013010   | Y      | 4.006          | 04/25/2018<br>08:52:54 |    | 5.5162               | 5                     | 1            | 0.9208          | 0.965            | М             |              |
| LIPID   | DUP         | 1678325       | Y      | 2.327          | 04/25/2018<br>08:53:15 |    | 8.8754               | 5                     | 1            | 0.924           | 0.9653           | М             | 1677646      |
| LIPID   | MS          | 1683167       | Y      | 2.707          | 04/25/2018<br>08:53:15 |    | 8.1647               | 5                     | 1            | .9248           | 0.969            | М             | 1677645      |

Non SPG Porent For QC

### B 4 A

### Pace Analytical\* Prep Log Report

Batch Information: OEXT 287437 LIPIDS

### Template Version: F-GB-O-145-Rev.01 (22Mar2018) LIPID

| nalysis Method Pace Lipid | Analyzed By ETB                   | Instrument 40BALL | Batch Notes |
|---------------------------|-----------------------------------|-------------------|-------------|
| Reviewed By BLM           | Reviewed By Date 05/10/2018 14:40 | (2) (4) (4) (5)   |             |

Sample Information:

| •       |             |             |        |               |                        |   | T                    |             |              |                 |                  |              |              |
|---------|-------------|-------------|--------|---------------|------------------------|---|----------------------|-------------|--------------|-----------------|------------------|--------------|--------------|
|         | Sample Type | Sample ID   |        | ipid % Posted | Date/Time              |   | Sample Weight<br>(g) | e Volume    | t (mL)       | Jish Weight (g) | Dry Weight 1 (g) | Dry Wt Use 1 | Sample Notes |
| QC Rule | Sample      | Lab Sa      | Select | Lipid %       | Run De                 | 0 | Sample<br>(9)        | Sample (mL) | Aliquot (mL) | Dish W          | Dry We           | Jry Wt       | Sample       |
| LIPID   | BLANK       | 1681739     | Y      | 0.01000       | 04/30/2018<br>14:40:12 |   | 10                   | 5           | 1            | 0.9371          | 0.9373           | М            | 1681428      |
| LIPID   | BLANK       | 1681740     | Y      | 0.01000       | 04/30/2018<br>14:40:22 |   | 10                   | 5           | 1            | 0.9345          | 0.9347           | М            | 1681429      |
| LIPID   | RQS         | 40157940015 | Y      | 3.652         | 04/30/2018<br>14:40:33 |   | 9.9936               | 5           | 1            | 0.9321          | 1.0051           | М            |              |
| LIPID   | DUP         | 1681741     | Y      | 3.691         | 04/30/2018<br>14:40:48 |   | 9.9851               | 5           | 1            | 0.9318          | 1.0055           | М            | 1681911      |
| LIPID   | PS          | 40157948008 | Y      | 3.121         | 04/30/2018<br>14:41:14 |   | 10.0142              | 5           | 1            | 0.9354          | 0.9979           | М            |              |
| LIPID   | PS          | 40157948009 | Y      | 4.607         | 04/30/2018<br>14:41:25 |   | 10.0164              | 5           | 1            | 0.9347          | 1.027            | М            |              |
| LIPID   | RQS         | 40157948011 | Y      | 2.652         | 04/30/2018<br>14:41:37 |   | 10.0294              | 5           | 1            | 0.9372          | 0.9904           | М            |              |
| LIPID   | DUP         | 1681743     | Y      | 2.816         | 04/30/2018<br>14:41:50 |   | 10.0332              | 5           | 1            | 0.9330          | 0.9895           | М            | 1681432      |
| LIPID   | PS          | 40157948014 | Y      | 2.497         | 04/30/2018<br>14:42:01 |   | 10.0131              | 5           | 1            | 0.9370          | 0.987            | М            |              |
| LIPID   | PS          | 40158017001 | Y      | 3.726         | 04/30/2018<br>14:42:10 |   | 9.9702               | 5           | 1            | 0.9370          | 1.0113           | М            |              |
| LIPID   | PS          | 40158017002 | Y      | 1.841         | 04/30/2018<br>14:42:31 |   | 9.9957               | 5           | 1            | 0.9381          | 0.9749           | М            |              |
| LIPID   | PS          | 40158017016 | Y      | 2.903         | 04/30/2018<br>14:42:40 |   | 9.9898               | 5           | 1            | 0.9378          | 0.9958           | М            |              |
| LIPID   | PS          | 40158017017 | Y      | 2.646         | 04/30/2018<br>14:42:51 |   | 10.0147              | 5           | 1            | 0.9332          | 0.9862           | М            |              |
| LIPID   | PS          | 40158017018 | Y      | 1.935         | 04/30/2018<br>14:43:04 |   | 10.0284              | 5           | 1            | 0.9355          | 0.9743           | М            |              |
| LIPID   | PS          | 40158017019 | Y      | 3.140         | 04/30/2018<br>14:43:20 |   | 10.0003              | 5           | 1            | 0.9400          | 1.0028           | М            |              |
| LIPID   | RQS         | 40158017020 | Y      | 2.909         | 04/30/2018<br>14:43:32 |   | 10.002               | 5           | 1            | 0.9396          | 0.9978           | М            |              |
| LIPID   | DUP         | 1681744     | Y      | 2.648         | 04/30/2018<br>14:43:43 |   | 10.0261              | 5           | 1            | 0.9384          | 0.9915           | М            | 1681433      |
| LIPID   | PS          | 40158029002 | Y      | 4.392         | 04/30/2018<br>14:43:54 |   | 9.985                | 5           | 1            | 0.9337          | 1.0214           | М            |              |
| LIPID   | RQS         | 40158029004 | Y      | 3.531         | 04/30/2018<br>14:44:03 |   | 10.0264              | 5           | 1            | 0.9369          | 1.0077           | М            |              |

# Pace Analytical Prep Log Report

| QC Rule | Sample Type | Lab Sample ID | Select | Lipid % Posted | Run Date/Time          | Sample Weight<br>(g) | Sample Volume<br>(mL) | Aliquot (mL) | Dish Weight (g) | Dry Weight 1 (g) | Dry Wt Use 1 | Sample Notes |
|---------|-------------|---------------|--------|----------------|------------------------|----------------------|-----------------------|--------------|-----------------|------------------|--------------|--------------|
| LIPID   | DUP         | 1681745       | Y      | 3.682          | 04/30/2018<br>14:44:11 | 10.0092              | 5                     | 1            | 0.9329          | 1.0066           | М            | 1681434      |
| LIPID   | MS          | 1688378       | Y      | 3.751 🗸        | 04/30/2018<br>14:44:11 | 9.9846               | 5                     | 1            | .9373           | 1.0122           | М            | 1681430      |

Pace Analytical

| Client Name:               | 2         |
|----------------------------|-----------|
| Project #:                 | 40157990  |
| Sample Type: Fish          |           |
| Date/Time Removed to Thaw: | 04-16-18- |
| Oate/Time Prepped:         | 04-110-18 |

Biota Homogenization Log (NYDOH Method)

Date/Time Prepped:

Prepped by:

CWN t JL+PM

Location Thawed: 40FRG21 /Room Temperature (circle one)

Logbook: 4413

| Sample ID  | A) Scales Removed<br>B) Skin Removed<br>(Note A or B Below) | Whole<br>Body/Fillet<br>(WB/F) | Picture of<br>Fish/Weight<br>Taken?<br>(Y/N) | Total Fish<br>Weight (g) | Internal<br>Organs<br>Intact<br>(Y/N) | Gender<br>(Optional)<br>M/F/U <sup>1</sup> | Fillet<br>Weight (g) | Left/Both   | Picture of<br>Fillet/Weight<br>Taken? (Y/N) | Container<br>Code <sup>3</sup> | Number of<br>Containers<br>Used | Picture of<br>Jars/Weight<br>Taken? (Y/N) | Weight of<br>homogenized<br>Sample (g) | Processing Type (C/G/R/RM) <sup>4</sup> |   |
|------------|---|--------------------------------|--|--------------------------|---------------------------------------|--|----------------------|-------------|---|--------------------------------|---------------------------------|---|--|---|---|
|            | NA  | MB                             | Y  | 25.4                     | Y                                     | NA   | NA                   | Left / Both | NIA   | 416                            | 1                               | y   | 23.4                                   | (C/G/FORM)                              | Sample Comments                         |
| 2          |   |                                | ļ  | 12.6                     |                                       | <u> </u>                                   |                      | Left / Both | ì   |                                |                                 | Y   | 17.4                                   | 1                                       |   |
| 1 3        |   |                                |  | 12.9                     |                                       |  |                      | Left / Both |   |                                |                                 | ý   | 11.9                                   |   |   |
| 7          |   |                                |  | 8.8                      |                                       |  |                      | Left / Both |   |                                | ì                               | Ý   | 8.2                                    |   |   |
|            |   |                                |  | 22.4                     |                                       |  |                      | Left / Both |   |                                | 1                               | Y   | 20.7                                   |   |   |
| 1-3        |   |                                |  | 26.7                     |                                       |  |                      | Left / Both |   |                                |                                 | · Y                                       | 24.6                                   |   |   |
| 8          |   |                                |  | 11.1                     |                                       |  |                      | Left / Both |   |                                |                                 | Y   | 10.3                                   |   |   |
| 9          |   |                                |  | 8.3<br>8.D               |                                       |  |                      | Left / Both |   |                                | 1                               | Y   | 7.7                                    |   |   |
| <u> 10</u> |   |                                |  | 13.2                     | _                                     |  |                      | Left / Both |   |                                | 1                               | 1   | 7.5                                    |   |   |
| 9 11       |   |                                |  | 6.3                      |                                       |  |                      | Left / Both |   |                                |                                 | <u> </u>                                  | 12.2                                   |   | *************************************** |
| 8 12       |   |                                |  | 16.2                     |                                       |  |                      | Left / Both |   |                                | 1                               | y   | 5.8                                    |   |   |
| 13         |   |                                |  | 10.3                     |                                       |  |                      | Left / Both |   |                                |                                 | - Y                                       | 14.9                                   |   |   |
| 14         |   |                                |  | 11.2                     |                                       |  |                      | Left / Both |   |                                | 1                               | <u> </u>                                  | 9.6                                    |   |   |
| 15         |   |                                |  | 718                      |                                       |  |                      | Left / Both |   |                                | 1                               |   | 13.1<br>68.6                           |   |   |
| 16         |   |                                |  | 13.8                     |                                       |  |                      | Left / Both |   |                                | 1                               |   | 12.9                                   |   |   |
| 17         |   |                                |  | 15.8                     |                                       |  |                      | Left / Both |   | <b></b>                        | '                               |   | 15.1                                   |   |   |
| 18         |   |                                |  | 13.5                     |                                       |  |                      | Left / Both |   |                                | 1                               | 7   | 12.6                                   |   |   |
| 19         |   |                                |  | 24.6                     |                                       |  |                      | Left / Both |   |                                |                                 | <u>-</u> -                                | 22.7                                   |   |   |
| 20         | *   | *                              | *  | 21.9                     | ×                                     | *  | *                    | Left / Both | *   | *                              | i                               | <u>-</u>                                  | 19.4                                   | <del></del>                             |   |

(1) M = Male, F = Female, U = Undetermined

(2) If left fillet weight is under 40g, the right fillet in included in the sample weight.

(3) Note Container Type / Lot # using Codes Below:

| Container Code | Container Size    | Lot#         |
|----------------|-------------------|--------------|
| 2CG            | 2 oz Clear Glass  |              |
| 4AG            | 4 oz Amber Glass  | G-7-243-010B |
| 9AG            | 9 oz Amber Glass  |              |
| 32AG           | 32 oz Amber Glass |              |

(4) Processing Type Code Descriptions:

| Code | Description of Code          |
|------|------------------------------|
| C    | Chopped                      |
| G    | Grind                        |
| R    | Robot coupe                  |
| RM   | Robot coupe multiple batches |

F-GB-O-153-REV.01 (21Feb2018)

Reviewed By

CWN 04-17-18

4/21/18

Page 51

Pace Analytical Services, LLC - Green Bay, WI



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: TD5-170828-01-PKSD-02

Lab ID: 40157940001

Collected: 08/28/17 14:11

Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Arodor 1016)   | <34.1      | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 110J       | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <34.1      | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <34.1      | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 984        | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 571        | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 77.5J      | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 11096-82-5 |      |
| PCB, Total Surrogates    | 1740       | ug/kg       | 150         | 34.1        | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 99         | %           | 60-140      |             | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 106        | %           | 60-140      |             | 3     | 04/24/18 07:41 | 04/25/18 15:29 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pad | e Lipid     |             |       |                |                |            |      |
| Lipid                    | 2.1        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:49 |            |      |

# REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: TD3-170828-01-PKSD-05

Lab ID: 40157940002

Collected: 08/28/17 15:10 Received: 10/04/17 14:05 Matrix: Tissue

| Results | reported | on a  | "wet-weight" basis |
|---------|----------|-------|--------------------|
| Nesulls | reporteu | UII a | wel-weigin basis   |

| Parameters               | Results    | Units       | PQL         | MDL         | DF       | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|----------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | A 8082A Mod | Preparation | n lyketh | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <1140      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <1140      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 |            |      |
| PCB-1232 (Aroclor 1232)  | <1140      | ug/kg       | 5010        | 1140        | 100      | 4/24/18 07:41  | 04/25/18 15:45 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <1140      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 20400      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 10400      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | <1140      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 11096-82-5 |      |
| PCB, Total Surrogates    | 30800      | ug/kg       | 5010        | 1140        | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 0          | %           | 60-140      |             | 100      | Ø4/24/18 07:41 | 04/25/18 15:45 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0          | %           | 60-140      | Å           | 100      | 04/24/18 07:41 | 04/25/18 15:45 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pac | e Lipid     |             |          | 7              |                |            |      |
| Lipid                    | 3.6        | %           | 0.030       | 0.030       | 1        |                | 04/25/18 08:49 |            |      |

DINAME TO QUED

REPORT OF LABORATORY ANALYSIS

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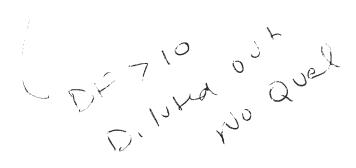
Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: TD3-170828-01-PKSD-04 Lab ID: 40157940003 Collected: 08/28/17 15:09 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results      | Units      | PQL         | MDL         | DF      | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|--------------|------------|-------------|-------------|---------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical   | Method: EP | A 8082A Mod | Preparation | n Metho | d: EPA 3541    |                |            |      |
| PCB-1016 (Aroclor 1016)  | <1140        | ug/kg      | 4990        | 1140        | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <1140        | ug/kg      | 4990        | 1140        | /100    | 04/24/18 07:41 | 04/25/18 16:01 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <1140        | ug/kg      | 4990        | 1140 /      | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <1140        | ug/kg      | 4990        | 1140        | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 19900        | ug/kg      | 4990        | 114ø        | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 10700        | ug/kg      | 4990        | 114/0       | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | <1140        | ug/kg      | 4990        | 1140        | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 11096-82-5 |      |
| PCB, Total               | 30600        | ug/kg      | 4990        | 1140        | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 1336-36-3  |      |
| Surrogates               |              |            |             |             | ,       |                |                |            |      |
| Tetrachloro-m-xylene (S) | / 0          | %          | 60-140      |             | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | <i>∫</i> - 0 | %          | 60-140      | 1           | 100     | 04/24/18 07:41 | 04/25/18 16:01 | 2051-24-3  | S4   |
| Lipid                    | Analytical   | Method: Pa | ce Lipid    |             | /       |                |                |            |      |
| Lipid                    | 3.2          | %          | 0.030       | 0.030       | 1       |                | 04/25/18 08:49 |            |      |





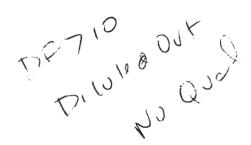
Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Collected: 08/28/17 15:07 Received: 10/04/17 14:05 Matrix: Tissue Sample: TD3-170828-01-PKSD-03 Lab ID: 40157940004

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | ĎF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EP  | A 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <709       | ug/kg       | 3110        | 709/        | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <709       | ug/kg       | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <709       | ug/kg       | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <709       | ug/kg       | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 10300      | ug/kg       | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 7300       | ug/kg       | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 814J       | ug/kg       | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 11096-82-5 |      |
| PCB, Total               | 18400      | - ug/kg     | 3110        | 709         | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 1336-36-3  |      |
| Surrogates               |            | , -         |             |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | / 0        | %           | 60-140      | \           | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | <i>i</i> 0 | %           | 60-140      | 1           | 50    | 04/24/18 07:41 | 04/25/18 16:16 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pad | ce Lipid    | /           | . /   | /              |                |            |      |
| Lipid                    | 2.2        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:49 |            |      |





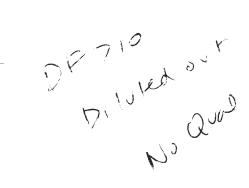
Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: TD3-170828-01-PKSD-02 Lab ID: 40157940005 Collected: 08/28/17 15:05 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results       | Units      | PQL         | MDL         | DF      | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|---------------|------------|-------------|-------------|---------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical I  | Method: EP | A 8082A Mod | Preparation | n Methy | d: EPA 3541    |                |            |      |
| PCB-1016 (Aroclor 1016)  | <2280         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 12674-11-2 | 1q   |
| PCB-1221 (Aroclor 1221)  | <2280         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <2280         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <2280         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 66500         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 26700         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | <2280         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 11096-82-5 |      |
| PCB, Total Surrogates    | 93200         | ug/kg      | 10000       | 2280        | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | , 0           | %          | 60-140      |             | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | / 0 /         | %          | 60-140      |             | 200     | 04/24/18 07:41 | 04/26/18 13:56 | 2051-24-3  | S4   |
| Lipid                    | A halytical I | Method: Pa | ce Lipid    |             | \ .     | /              |                |            |      |
| Lipid                    | 3.4           | %          | 0.030       | 0.030       | 1       |                | 04/25/18 08:50 |            |      |







Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: TD2-170828-01-PKSD-02 Lab ID: 40157940006 Collected: 08/28/17 12:19 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL _       | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <34.3      | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 12674-11-2 |      |
| PCB-1221 (Arodor 1221)   | <34.3      | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <34.3      | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <34.3      | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 740        | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 395        | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 49.3J      | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 11096-82-5 |      |
| PCB, Total<br>Surrogates | 1180       | ug/kg       | 151         | 34.3        | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 90         | %           | 60-140      |             | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 100        | %           | 60-140      |             | 3     | 04/24/18 07:41 | 04/25/18 16:48 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pad | e Lipid     |             |       |                |                |            |      |
| Lipid                    | 2.7        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:50 |            |      |

# REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: TD2-170828-01-PKSD-01

Lab ID: 40157940007

Collected: 08/28/17 12:15 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <23.5      | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 55.2J      | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <23.5      | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <23.5      | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 490        | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 282        | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 41.5J      | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 11096-82-5 |      |
| PCB, Total<br>Surrogates | 868        | ug/kg       | 103         | 23.5        | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 97         | %           | 60-140      |             | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 101        | %           | 60-140      |             | 2     | 04/24/18 07:41 | 04/25/18 17:04 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pac | e Lipid     |             |       |                |                |            |      |
| Lipid                    | 2.2        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:50 |            |      |



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: TD1-170828-01-PKSD-05

Lab ID: 40157940008

Collected: 08/28/17 12:00 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL            | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|----------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod Pi | reparation  | Metho | d: EPA 3541    |                |            |      |
| PCB-1016 (Aroclor 1016)  | <316       | ug/kg       | 1390           | 316         | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <316       | ug/kg       | 1390           | 316         | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <316       | ug/kg       | 1390           | 3/16        | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <316       | ug/kg       | 1390           | <b>3</b> 16 | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 6660       | ug/kg       | 1390           | <b>\$16</b> | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 5530       | ug/kg       | 1390           | 316         | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 657J       | ug/kg       | 1390           | 316         | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 11096-82-5 |      |
| PCB, Total               | 12800      | ug/kg       | 1390           | 316         | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 1336-36-3  |      |
| Surrogates               |            |             |                |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | 0          | %           | 60-140 /       |             | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0          | %           | 60-140         | ,           | 20    | 04/24/18 07:41 | 04/25/18 17:52 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pac | e Lipid        |             |       |                |                |            |      |
| Lipid                    | 3.9        | %           | 0.030          | 0.030       | 1     |                | 04/25/18 08:50 |            |      |

OFTION OUT



Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: TD1-170828-01-PKSD-04 Lab ID: 40157940009 Collected: 08/28/17 11:58 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results      | Units       | PQL         | MDL          | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|--------------|-------------|-------------|--------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical N | Method: EPA | A 8082A Mod | Preparation  | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <237         | ug/kg       | 1040        | 237/         | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <237         | ug/kg       | 1040        | 237          | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <237         | ug/kg       | 1040        | 2 <b>%</b> 7 | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <237         | ug/kg       | 1040        | <b>2</b> 37  | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 4080         | ug/kg       | 1040        | 237          | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 2880         | ug/kg       | 1040        | 237          | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | ∕ 331J       | ug/kg       | 1040        | 237          | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 11096-82-5 |      |
| PCB, Total               | /1290        | ug/kg       | 1040        | 237          | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 1336-36-3  |      |
| Surrogates               | /            |             |             |              |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | : 0          | %           | 60-140      |              | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | . 0          | %           | 60-140      |              | 15    | 04/24/18 07:41 | 04/25/18 18:08 | 2051-24-3  | S4   |
| Lipid                    | Analytical N | Method: Pac | ce Lipid    | T.           |       |                |                |            |      |
| Lipid                    | 3.7          | %           | 0.030       | 0.030        | 1     |                | 04/25/18 08:50 |            |      |
|                          |              |             |             |              |       |                |                |            |      |

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Page 18 of 41



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: TD1-170828-01-PKSD-03

Lab ID: 40157940010

Collected: 08/28/17 11:56 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF   | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod | Preparation | Meth | od: EPA 3541   |                |            |      |
| PCB-1016 (Arodor 1016)   | <114       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <114       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <114       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <114       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 2120       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 1760       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 204J       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 11096-82-5 |      |
| PCB, Total Surrogates    | 4080       | ug/kg       | 502         | 114         | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 99         | %           | 60-140      |             | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 118        | %           | 60-140      |             | 10   | 04/24/18 07:41 | 04/25/18 18:23 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pac | e Lipid     |             |      |                |                |            |      |
| Lipid                    | 3.0        | %           | 0.030       | 0.030       | 1    |                | 04/25/18 08:50 |            |      |

# REPORT OF LABORATORY ANALYSIS

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Page 20 of 41



# **ANALYTICAL RESULTS**

Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Date: 05/10/2018 03:56 PM

Sample: TD1-170828-01-PKSD-02 Lab ID: 40157940011 Collected: 08/28/17 11:53 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | A 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <205       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <205       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <205       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <205       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 3850       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 2510       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 279J       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 11096-82-5 |      |
| PCB, Total Surrogates    | 6640       | ug/kg       | 901         | 205         | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 93         | %           | 60-140      |             | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 110        | %           | 60-140      |             | 10    | 04/24/18 07:41 | 04/25/18 18:39 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pad | ce Lipid    |             |       |                |                |            |      |
| Lipid                    | 3.4        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:51 |            |      |

# **REPORT OF LABORATORY ANALYSIS**



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: ND2-170828-01-PKSD-04

Lab ID: 40157940012

Collected: 08/28/17 17:51 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF      | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|---------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | A 8082A Mod | Preparation | r Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <343       | ug/kg       | 1500        | 343/        | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 1600       | ug/kg       | 1500        | 34\$        | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <343       | ug/kg       | 1500        | 343         | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <343       | ug/kg       | 1500        | 3/43        | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 4750       | ug/kg       | 1500        | 343         | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 2340       | ug/kg       | 1500        | 343         | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 454J       | ug/kg       | 1500        | 343         | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 11096-82-5 |      |
| PCB, Total<br>Surrogates | 9160       | ug/kg       | 1500        | 343         | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | / 0        | %           | 60-140      |             | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0          | <i>/</i> %  | 60-140      |             | 30      | 04/24/18 07:41 | 04/25/18 18:55 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pac | e Lipid     |             |         |                |                |            |      |
| Lipid                    | , · 3.6    | %           | 0.030       | 0.030       | 1       |                | 04/25/18 08:51 |            |      |

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Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Date: 05/10/2018 03:56 PM

Sample: ND2-170828-01-PKSD-03 Lab ID: 40157940013 Collected: 08/28/17 17:50 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results I      | Units     | PQL           | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|----------------|-----------|---------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical Met | thod: EPA | 8082A Mod   F | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <380 u         | ıg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 12674-11-2 | 1g   |
| PCB-1221 (Aroclor 1221)  |                | ıg/kg     | 1660          | 380/        | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 11104-28-2 | •    |
| PCB-1232 (Aroclor 1232)  | <380 ∪         | Jg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <380 ∪         | ıg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | <b>6250</b> u  | ıg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | <b>3300</b> u  | ıg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 504J t         | ıg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 11096-82-5 |      |
| PCB, Total Surrogates    | 12600          | ıg/kg     | 1660          | 380         | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | /′ 0 ,         | %         | 60-140        | ļ           | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0 .            | %         | 60-140        | /           | 30    | 04/24/18 07:41 | 04/27/18 09:36 | 2051-24-3  | S4   |
| Lipid                    | Analytical Met | hod: Pace | e Lipid       | \           | ,     | Ź              |                |            |      |
| Lipid                    | 4.0            | %         | 0.030         | 0.030       | 14    |                | 04/25/18 08:51 |            |      |

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Page 22 of 41



HUDSON RIVER REMEDIAL ACTION M Project:

Pace Project No.: 40157940

Date: 05/10/2018 03:56 PM

Sample: ND2-170828-01-PKSD-02 Lab ID: 40157940014 Collected: 08/28/17 17:48 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results       | Units       | PQL         | MDL         | DF   | Prepared       | Analyzed               | CAS No.    | Qual |
|--------------------------|---------------|-------------|-------------|-------------|------|----------------|------------------------|------------|------|
| 8082A Modified GCT PCB   | Analytical    | Method: EPA | A 8082A Mod | Preparation | Meth | od: EPA 3541   |                        |            |      |
| PCB-1016 (Aroclor 1016)  | <569          | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | < 569         | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | < 569         | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | < 569         | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 <b>1</b> 9:27 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 10200         | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 4950          | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | < 569         | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 11096-82-5 |      |
| PCB, Total               | <b>1</b> 5200 | ug/kg       | 2500        | 569         | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 1336-36-3  |      |
| Surrogates               |               |             |             |             |      |                |                        |            |      |
| Tetrachloro-m-xylene (S) | 0             | %           | 60-140      |             | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0             | / %         | 60-140      |             | 50   | 04/24/18 07:41 | 04/25/18 19:27         | 2051-24-3  | S4   |
| Lipid                    | Analytical    | Method: Pad | e Lipid     |             | ۳,   |                |                        |            |      |
| Lipid                    | 3.1           | %           | 0.030       | 0.030       | 1    |                | 04/25/18 08:51         |            |      |
|                          | \             |             |             |             | 1    |                |                        |            |      |

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Page 24 of 41



# **ANALYTICAL RESULTS**

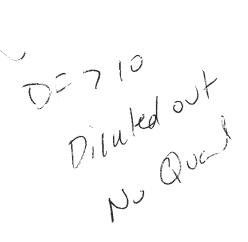
Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Date: 05/10/2018 03:56 PM

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL         | DF    | Prepared   | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|-------------|-------|--|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EP/ | A 8082A Mod F | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <228       | ug/kg       | 1000          | 228/        | 20    | 04)30/18 10:28   | 05/07/18 15:10 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 996J       | ug/kg       | 1000          | 22\$        | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <228       | ug/kg       | 1000          | 228         | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <228       | ug/kg       | 1000          | 228         | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 53469-21-9 | M6   |
| PCB-1248 (Aroclor 1248)  | 2930       | ug/kg       | 1000          | 228         | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 1260       | ug/kg       | 1000          | 228         | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 288J       | ug/kg       | 1000          | 228         | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 11096-82-5 |      |
| PCB, Total Surrogates    | 5470       | ug/kg       | 1000          | 228         | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | / / o      | %           | 60-140        |             | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0          | %           | 60-140        |             | 20    | 04/30/18 10:28   | 05/07/18 15:10 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pad | e Lipid       |             |       | e de la companya del companya de la companya del companya de la co |                |            |      |
| Lipid                    | 3.7        | %           | 0.030         | 0.030       | 1 .   |  | 04/30/18 14:40 |            |      |





Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: ND1-170828-01-PKSD-06

Lab ID: 40157940016

Collected: 08/28/17 17:41 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL           | MDL        | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|---------------|------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EP  | A 8082A Mod F | reparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <228       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <228       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <228       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <228       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 3920       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 2120       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 242J       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 11096-82-5 |      |
| PCB, Total Surrogates    | 6290       | ug/kg       | 1000          | 228        | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | / 0        | %           | 60-140        |            | 20    | 04/24/18/07:41 | 04/25/18 19:43 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0          | / %         | 60-140        |            | 20    | 04/24/18 07:41 | 04/25/18 19:43 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pad | ce Lipid      |            |       |                |                |            |      |
| Lipid                    | 3.3        | %           | 0.030         | 0.030      | 1_    |                | 04/25/18 08:52 |            |      |

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Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Sample: ND1-170828-01-PKSD-05

Lab ID: 40157940017

Collected: 08/28/17 17:40 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EP  | A 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <227       | ug/kg       | 997         | 227 /       | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | <227       | ug/kg       | 997         | 227 ′       | / 20  | 04/24/18 07:41 | 04/25/18 19:59 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <227       | ug/kg       | 997         | 227         | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <227       | ug/kg       | 997         | 227         | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 3540       | ug/kg       | 997         | 227         | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 2340       | ug/kg       | 997         | 227         | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 253J       | ug/kg       | 997         | 227         | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 11096-82-5 |      |
| PCB, Total               | 6130       | ug/kg       | 997         | 227         | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 1336-36-3  |      |
| Surrogates               | 0          |             |             |             |       | 1              |                |            |      |
| Tetrachloro-m-xylene (S) | /′ 0       | %           | 60-140      |             | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | 0          | / %         | 60-140      |             | 20    | 04/24/18 07:41 | 04/25/18 19:59 | 2051-24-3  | S4   |
| Lipid                    | Analytical | Method: Pad | ce Lipid    | /           | . /   |                |                |            |      |
| Lipid                    | 4.6        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:52 |            |      |
|                          |            |             |             |             |       |                |                |            |      |

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#### REPORT OF LABORATORY ANALYSIS

40157940



Project: HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: ND1-170828-01-PKSD-03 Lab ID: 40157940018 Collected: 08/28/17 17:36 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results _  | Units       | PQL         | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | \ 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <56.9      | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 145J       | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <56.9      | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <56.9      | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 1320       | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 805        | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 116J       | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 11096-82-5 |      |
| PCB, Total<br>Surrogates | 2390       | ug/kg       | 250         | 56.9        | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 98         | %           | 60-140      |             | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 111        | %           | 60-140      |             | 5     | 04/24/18 07:41 | 04/25/18 20:15 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pac | e Lipid     |             |       |                |                |            |      |
| Lipid                    | 2.9        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:52 |            |      |

# REPORT OF LABORATORY ANALYSIS



Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Sample: ND1-170828-01-PKSD-02

Lab ID: 40157940019

Collected: 08/28/17 17:35 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results     | Units       | PQL         | MDL /       | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|-------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical  | Method: EP  | A 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <342        | ug/kg       | 1500        | / 342       | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 3200        | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <342        | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <342        | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 6370        | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 2470        | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 496J        | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 11096-82-5 |      |
| PCB, Total               | 12500       | ug/kg       | 1500        | 342         | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 1336-36-3  |      |
| Surrogates               |             | <b>\</b>    |             |             |       |                |                |            |      |
| Tetrachloro-m-xylene (S) | $\bigcap$ 0 | %           | 60-140      |             | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 877-09-8   | S4   |
| Decachlorobiphenyl (S)   | / 0         | %           | 60-140      | 1           | 30    | 04/24/18 07:41 | 04/25/18 21:02 | 2051-24-3  | S4   |
| Lipid                    | Analytical  | Method: Pad | ce Lipid    |             |       |                |                |            |      |
| Lipid                    | 3.7         | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:52 |            |      |

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# REPORT OF LABORATORY ANALYSIS

Page 29 of 41



# ANALYTICAL RESULTS

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Date: 05/10/2018 03:56 PM

Sample: ND1-170828-01-PKSD-01

Lab ID: 40157940020

Collected: 08/28/17 17:33 Received: 10/04/17 14:05 Matrix: Tissue

Results reported on a "wet-weight" basis

| Parameters               | Results    | Units       | PQL         | MDL         | DF    | Prepared       | Analyzed       | CAS No.    | Qual |
|--------------------------|------------|-------------|-------------|-------------|-------|----------------|----------------|------------|------|
| 8082A Modified GCT PCB   | Analytical | Method: EPA | 4 8082A Mod | Preparation | Metho | od: EPA 3541   |                |            |      |
| PCB-1016 (Aroclor 1016)  | <45.6      | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 12674-11-2 |      |
| PCB-1221 (Aroclor 1221)  | 101J       | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 11104-28-2 |      |
| PCB-1232 (Aroclor 1232)  | <45.6      | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 11141-16-5 |      |
| PCB-1242 (Aroclor 1242)  | <45.6      | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 53469-21-9 |      |
| PCB-1248 (Aroclor 1248)  | 1080       | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 12672-29-6 |      |
| PCB-1254 (Aroclor 1254)  | 658        | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 11097-69-1 |      |
| PCB-1260 (Aroclor 1260)  | 79.0J      | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 11096-82-5 |      |
| PCB, Total<br>Surrogates | 1920       | ug/kg       | 200         | 45.6        | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 1336-36-3  |      |
| Tetrachloro-m-xylene (S) | 91         | %           | 60-140      |             | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 877-09-8   |      |
| Decachlorobiphenyl (S)   | 102        | %           | 60-140      |             | 4     | 04/24/18 07:41 | 04/25/18 21:18 | 2051-24-3  |      |
| Lipid                    | Analytical | Method: Pac | e Lipid     |             |       |                |                |            |      |
| Lipid                    | 2.0        | %           | 0.030       | 0.030       | 1     |                | 04/25/18 08:52 |            |      |

# REPORT OF LABORATORY ANALYSIS

# **SECTION 5**

CASE NARRATIVES AND CHAIN-OF-CUSTODY RECORDS



# **SAMPLE SUMMARY**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40148598

| Lab ID      | Sample ID            | Matrix | Date Collected Date   | e Received  |
|-------------|----------------------|--------|-----------------------|-------------|
| 40148598001 | TZ1-170418-01-STB-05 | Tissue | 04/18/17 17:48 🗸 04/1 | 19/17 09:30 |
| 40148598002 | TZ1-170418-01-STB-04 | Tissue | 04/18/17 17:44 🗸 04/1 | 19/17 09:30 |
| 40148598003 | TZ1-170418-01-STB-03 | Tissue | 04/18/17 17:42 🗸 04/1 | 9/17 09:30  |
| 40148598004 | TZ1-170418-01-STB-02 | Tissue | 04/18/17 17:40 🗸 04/1 | 9/17 09:30  |
| 40148598005 | TZ1-170418-01-STB-01 | Tissue | 04/18/17 17:35 🗸 04/1 | 9/17 09:30  |

# REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



# **CASE NARRATIVE - PCB ANALYSIS**

Lab Report Number (SDG): 40148598 Client: GENERAL ELECTRIC COMPANY

Project Name: HUDSON RIVER REMEDIAL ACTION MONITORING PROGRAM

Project Number: N/A

## 1. RECEIPT

Samples were received on ice at 2°C. Following homogenization, tissue samples were kept frozen at less than -10°C until time of preparation for analysis.

## 2. HOLDING TIMES

- A. Sample Preparation: All method and QAPP specified holding times were met.
- B. Sample Analysis: All method and QAPP specified holding times were met.

#### 3. METHOD

Preparation: SW-846 3541

Analysis: SW-846 8082A Modified

#### 4. PREPARATION

Sample preparation proceeded normally. All samples went through florisil and acid clean-up procedures prior to analysis.

# 5. ANALYSIS

- A. Calibration:
  - 1. Initial verification: All method acceptance criteria were met.
  - 2. Continuing verification: All method acceptance criteria were met.
- B. Blanks:
  - 1. **Method:** All acceptance criteria were met for the associated method blank.
- C. Surrogates: All QAPP specified acceptance criteria were met.
- D. Spikes:
  - Lab Control Spike (LCS): The control spike was fortified with Aroclor 1242 and met the QAPP specified accuracy criteria.
  - 2. Matrix Spike (MS): Sample TZ1-170418-01-STB-01 was designated as the parent sample for the MS for this SDG and one portion of the sample was fortified with Aroclor 1242. The MS required a 1:2 dilution to bring a non-fortified Aroclor within instrument calibration range. The QAPP specified accuracy criteria were met.
- E. Samples: Sample analyses proceeded normally. ZB-1ms is the quantitation column.
- **Sample Duplicate:** Sample TZ1-170418-01-STB-01 was designated as the duplicate for this SDG. The QAPP specified precision criteria were met. A batch duplicate was also analyzed with this SDG. Duplicate results are not evaluated below the reporting limit.
- **G. Dilutions:** Sample TZ1-170418-01-STB-01 was analyzed at a dilution to bring the level of Aroclors within the calibration range of the instrument.
- H. Reanalysis: None required for this SDG.
- **Comments:** Due to rounding differences in the software programs used, the values found on the quantitation reports may not match the values found on the sample Form 1s.

This data package was revised to address various client requests and to update Lipids reporting.

I certify that this data package is in compliance with the terms and conditions agreed to by **Pace Analytical Services**, **LLC**, and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this completed data package:

| Signed: Leigh A Begalske Date: 05/02/18                     |   |
|---|---|
| 0   |   |
| Name: Leigh A. Begalske Position: Quality Assurance Auditor | r |





#### **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

Method:

EPA 8082A Mod

Client:

Description: 8082A Modified GCT PCB General Electric

Date:

May 01, 2018

#### **General Information:**

5 samples were analyzed for EPA 8082A Mod. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 3541 with any exceptions noted below.

# Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

# Surrogates:

All surrogates were within QC limits with any exceptions noted below.

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

# Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

# **Additional Comments:**

# REPORT OF LABORATORY ANALYSIS



Pace Analytical Services, LLC 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

#### **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40148598

Method:

Pace Lipid

Client:

Description: Lipid General Electric

Date:

May 01, 2018

#### General Information:

5 samples were analyzed for Pace Lipid. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### **Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

# **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

# Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



| NVIRONMENTAL | SAMDIF CH | ATN OF | CHISTODY |
|--------------|-----------|--------|----------|

COC ID:

COC170418-T11-01

Sample Custodian:

MCS

40148598

|      |                         | eneral Electric Company | Project: Hudson River Remedial Action Monitoring Program |                |                |       |              |        |        | Lab:      |           |                        | Pace - Green Bay          |                               |                               |  |
|------|-------------------------|-------------------------|--|----------------|----------------|-------|--------------|--------|--------|-----------|-----------|------------------------|---------------------------|-------------------------------|-------------------------------|--|
|      | COC<br>Sample<br>Number | Sampling Event ID       | Field Sample ID  | Sample<br>Date | Sample<br>Time | MS/LD | # CONTAINERS | Media* | Prep** | Composite | EPA Split | Total PCBs<br>NE013_09 | Total PCBs<br>SW846 8082A | Percent Lipid<br>(5-GB-O-068) | Fillet Weight<br>(S-GB-L-009) |  |
| 001  | 001                     | TZ1-170418-01           | TZ1-170418-01-STB-05                                     | 4/18/2017      | 17:48          |       | 1            | F      | FLRC   |           |           |                        | Y                         | Z                             | ~                             | A STATE OF THE STA |
| 002  | 002                     | TZ1-170418-01           | TZ1-170418-01-STB-04                                     | 4/18/2017      | 17:44          |       | 1            | F      | FLRC   |           | Ü         |                        | ~                         | ~                             | ~                             |  |
| (CO) | 003                     | TZ1-170418-01           | TZ1-170418-01-STB-03                                     | 4/18/2017      | 17:42          |       | 1            | F      | FLRC   |           |           |                        | ~                         | 1                             | ~                             |  |
| 04   | 004                     | TZ1-170418-01           | TZ1-170418-01-STB-02                                     | 4/18/2017      | 17:40          |       | 1            | F      | FLRC   |           |           |                        | ~                         | V                             | ~                             |  |
| 005  | 005                     | TZ1-170418-01           | TZ1-170418-01-STB-01                                     | 4/18/2017      | 17:35          | ~     | 1            | F      | FLRC   |           |           |                        | Y                         | V                             | ~                             |  |

| Comments:  |   |  |                        |  |  |  |  |  |  |
|--|---|--|------------------------|--|--|--|--|--|--|
|  |   |  | 6.4                    |  |  |  |  |  |  |
| Relinquished by:   | Received by:                                  | Relinguished by:   | Received by:           | Relinquished by:                             | Received by:                           |  |  |  |  |
|  | Signature :                                   |  |                        |  | Signature                              |  |  |  |  |
| Print Name / Jin Kyan  | Print Name Fed Ex                             | Print Name Fed EX  | Print Name Sty Milesa  | Print Name                                   | Print Name                             |  |  |  |  |
| HYCOUL GALL  | Company                                       |  | Company Price          | Сетрапу                                      | Company                                |  |  |  |  |
| Date/Time 4/18/17 19:00  | Date/Time                                     | Date/Time 4/14/17 0930/  | Dete/Time 4/14/17 0930 | Date/Time                                    | Date/Time                              |  |  |  |  |
| THE RESERVE OF THE PROPERTY OF | PARTIES SEED HELVESTE HET MINNER MESSETTIMETE | D. W. (a) All M. (b) A. |                        | 15/31/18 ··································· | we see to a new or the see the seed of |  |  |  |  |
| Date Printed: 4/18/2017  | * F= FISH *                                   | **F=Fillet, WH=Whole Body, C   | COC TYPE: TH           | PCB-LIPD-PEST-MERCURY                        | Page 1 of 1                            |  |  |  |  |

Tevised 611/18



|                  | ANC              |          |                  |
|------------------|------------------|----------|------------------|
| V,               | <b>QEA</b>       | ~        |                  |
| 305 Il'est Grand | trenne Monorale, | NJ 07645 | Ph: 201-936-9890 |

# **ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY**

COC ID:

COC170418-T11-01

Sample Custodian: Lab:

MCS

|     |                         | eneral Electric Company | Project: Hudson      | Project: Hudson River Remedial Action Monitoring Program |                |          |              |        |        |           | La        | ıb:                    |                           | Pace - Green Bay              |                              |  |
|-----|-------------------------|-------------------------|----------------------|--|----------------|----------|--------------|--------|--------|-----------|-----------|------------------------|---------------------------|-------------------------------|------------------------------|--|
|     | COC<br>Sample<br>Number | Sampling Event ID       | Field Sample ID      | Sample<br>Date   | Sample<br>Time | MS/LD    | # CONTAINERS | Media* | Prep** | Composite | EPA Split | Total PCBs<br>NE013_09 | Total PCBs<br>SW846 8082A | Percent Lipid<br>(5-GB-0-068) | Filet Weight<br>(S-GB-L-009) |  |
| 001 | 001                     | TZ1-170418-01           | TZ1-170418-01-STB-05 | 4/18/2017  | 17:48          |          | 1            | F      | FLRC   |           |           |                        | Y                         | Y                             | ~                            |  |
| 002 | 002                     | TZ1-170418-01           | TZ1-170418-01-STB-04 | 4/18/2017  | 17:44          |          | 1            | F      | FLRC   |           |           |                        | <b>Y</b>                  | Y                             | Z                            |  |
| (D) | 003                     | TZ1-170418-01           | TZ1-170418-01-STB-03 | 4/18/2017  | 17:42          |          | 1            | F      | FLRC   |           |           |                        | ~                         | <b>V</b>                      | V                            |  |
| 004 | 004                     | TZ1-170418-01           | TZ1-170418-01-STB-02 | 4/18/2017  | 17:40          |          | 1            | F      | FLRC   |           |           |                        | <b>Y</b>                  | ~                             | ~                            |  |
| 005 | 005                     | TZ1-170418-01           | TZ1-170418-01-STB-01 | 4/18/2017  | 17:35          | <b>Y</b> | 1            | F      | FLRC   |           |           |                        | ~                         | Y                             | Y                            |  |

| Comments:               |                   |                        |                        |                  |              |
|-------------------------|-------------------|------------------------|------------------------|------------------|--------------|
| Relinquished by:        | Received by:      | Relinquished by:       | Received by:           | Relinguished by: | Received by: |
| Signature               | Signature *       | Signature              | Signature My Man Price | Signature        | Signature    |
| Print Name Jim Kyan     | Print Name Led Ex | Print Name Fed Ex      | Print Name Sun Milesa  | Print Name       | Print Name   |
| HYCZAL OLD              |                   |                        | Company Price          | Company          | Company      |
| Date/Time 4/18/17 19:00 | Date/Time         | Date/Time 4/14/17 0930 | Date/Time 4/19/17      | Date/Time        | Date/Time    |

Date Printed: 4/18/2017

\* F= FISH

\*\*F=Fillet, WH=Whole Body, O=Offal

COC TYPE: TPCB-LIPD-PEST-MERCURY

Page 1 of 1

# Sample Condition Upon Receipt

Pace Analytical Services, Inc. 1241 Bellevue Street, Suite 9 Green Bay, WI 54302

| / Pace Analytical   |             |              |                           |   |                        |
|---|-------------|--------------|---------------------------|---|------------------------|
| Client Name: Anchor QE  | A           |              | Project # WO:             | #:4014                                  | 8598                   |
| Courier: Fed Ex T UPS T Client Pac  | e Other:    | _            | 11.8.1.11                 |   | III                    |
| Tracking #: 786a 7360 8   | 380 0671    | . (0         | 687/                      |   |                        |
| Custody Seal on Cooler/Box Present: yes   |             |              | yes no 40148              | 598                                     |                        |
| Custody Seal on Samples Present: Tyes   |             |              | Гyes ⊓no 5 (              |   | 55M 4/9/17             |
| Packing Material:   Bubble Wrap   Bubble  |             |              |                           | + Maskieben                             | 5                      |
| Thermometer Used SR-73  | Type of Ice |              |                           |   | g process has begun    |
| Cooler Temperature Uncorr: 2 /Corr:   | مل          | Biolo        | gical Tissue is Frozen: 🔀 | yes                                     |                        |
| Temp Blank Present:   |             |              | Γ                         | no Person                               | examining contents:    |
| Temp should be above freezing to 6°C for all sample exc<br>Frozen Biota Samples should be received ≤ 0°C. | cept Biota. |              | Comments:                 | Date:Initials:                          | 4/19/17° SSM           |
| Chain of Custody Present:   | Yes □No     | □N/A         | 1.                        |   |                        |
| Chain of Custody Filled Out:  | Yes □No     | □N/A         | 2.                        |   |                        |
| Chain of Custody Relinquished:  | XYes □No    | □N/A         |                           |   |                        |
| Sampler Name & Signature on COC:  | `□Yes ZNo   | □n/a         | 4. Sampler No             | ime Pies                                | ent- OR                |
| Samples Arrived within Hold Time:   | ¥Ves □No    | □n/a         | 5.                        | ,                                       |                        |
| - VOA Samples frozen upon receipt   | □Yes □No    |              | Date/Time:                |   |                        |
| Short Hold Time Analysis (<72hr):   | □Yes XNo    | □N/A         | 6.                        |   |                        |
| Rush Turn Around Time Requested:  | □Yes 💆 No   | □N/A         | 7.                        |   |                        |
| Sufficient Volume:  | ¥Yes □No    | □n/a         | 8.                        |   |                        |
| Correct Containers Used:  | Øyes □No    | TAVA         | 9.                        |   |                        |
| -Pace Containers Used:  | □Yes (And)  | MAVA         | My 4/1                    |   | e.                     |
| -Pace IR Containers Used:   | □Yes □No    | XN/A         | 114/17                    |   |                        |
| Containers Intact:  | ∑Yes □No    | □n/a         | 10.                       |   |                        |
| Filtered volume received for Dissolved tests  | □Yes □No    | <b>≥</b> N/A | 11.                       |   |                        |
| Sample Labels match COC:  | ¥Yes □No    | □n/A         | 12.                       |   |                        |
| -Includes date/time/ID/Analysis Matrix:   | B           |              |                           |   |                        |
| All containers needing preservation have been checked. (Non-Compliance noted in 13.)                      | □Yes □No    | 2N/A         | THNO3 TH                  | 2SO4   NaOH                             | □ NaOH +ZnAct          |
| All containers needing preservation are found to be in  |             |              | 10.                       |   |                        |
| compliance with EPA recommendation.<br>(HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)                          | □Yes □No    | N/A          |                           |   |                        |
| exceptions: VOA, coliform, TOC, TOX, TOH,   |             |              | Initial when Lab Std #    | ID of                                   | Date/                  |
| O&G, WIDROW, Phenolics, OTHER:  | □Yes XNo    |              | completed preservat       | ive                                     | Time:                  |
| Headspace in VOA Vials ( >6mm):   | □Yes □No    | - / -        |                           |   |                        |
| Trip Blank Present:   | □Yes 🗖No    |              | 15.                       |   | :                      |
| Trip Blank Custody Seals Present  | □Yes □No    | SINIA        |                           |   |                        |
| Pace Trip Blank Lot # (if purchased):   |             |              |                           | and alternatives                        | v additional signature |
| Client Notification/ Resolution: Person Contacted:  |             | Date/        |                           |   | r additional comments  |
| Comments/ Resolution:   |             | - Date/      | Time:                     | *************************************** |                        |
|   |             |              |                           |   |                        |
|   |             |              |                           |   |                        |
|   |             |              |                           |   | 7                      |
| Project Manager Paul  | 1110        | R            | 1/1                       | Date:                                   | aln                    |
| Project Manager Review:   | VVV         | NN           | _//\ /                    | Date: 4//                               | T/1/                   |

F-GB-C-031-Rev.03 (9April2015) SCUR Form



# **SAMPLE SUMMARY**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40151542

| Lab ID      | Sample ID            | ,        | Matrix | Date Collected Date Received    |
|-------------|----------------------|----------|--------|---------------------------------|
| 40151542001 | TD4-170612-01-SMB-01 | 7,       | Tissue | 06/12/17 16:16 06/13/17 09:30   |
| 40151542002 | TD3-170612-01-SMB-05 |          | Tissue | 06/12/17 16:09 🗸 06/13/17 09:30 |
| 40151542003 | TD3-170612-01-SMB-04 | <b>/</b> | Tissue | 06/12/17 16:07 06/13/17 09:30   |
| 40151542004 | TD3-170612-01-SMB-03 |          | Tissue | 06/12/17 16:05 06/13/17 09:30   |
| 40151542005 | TD3-170612-01-SMB-02 | √.       | Tissue | 06/12/17 16:03 🗸 06/13/17 09:30 |
| 40151542006 | TD3-170612-01-SMB-01 |          | Tissue | 06/12/17 16:01 06/13/17 09:30   |



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### CASE NARRATIVE - PCB ANALYSIS

Lab Report Number (SDG): 40151542 Client: GENERAL ELECTRIC COMPANY

Project Name: HUDSON RIVER REMEDIAL ACTION, MONITORING PROGRAM

Project Number: N/A

# 1. RECEIPT

Samples were received on ice at 0°C. Following homogenization, tissue samples were kept frozen at less than -10°C until time of preparation for analysis.

# 2. HOLDING TIMES

- A. Sample Preparation: All method and QAPP specified holding times were met.
   B. Sample Analysis: All method and QAPP specified holding times were met.
- 3. METHOD

Preparation: SW-846 3541

Analysis: SW-846 8082A Modified

# 4. PREPARATION

Sample preparation proceeded normally. All samples went through florisil and acid clean-up procedures prior to analysis.

# 5. ANALYSIS

- A. Calibration:
  - 1. Initial verification: All method acceptance criteria were met.
  - 2. Continuing verification: All method acceptance criteria were met.
- B. Blanks:
  - 1. **Method:** All acceptance criteria were met for the associated method blank.
- C. Surrogates: All QAPP specified acceptance criteria were met.
- D. Spikes:
  - Lab Control Spike (LCS): The control spike was fortified with Aroclor 1242 and met the QAPP specified accuracy criteria.
  - 2. Matrix Spike (MS): Sample TD3-170612-01-SMB-03 was designated as the parent sample for the MS for this SDG and one portion of the sample was fortified with Aroclor 1242. The MS required a 1:10 dilution to bring a non-fortified Aroclor within instrument calibration range. The QAPP specified accuracy criteria were not met; the "M1" data qualifier was applied to the parent result on the final report.
- E. Samples: Sample analyses proceeded normally. ZB-1ms is the quantitation column.
- F. Sample Duplicate: Sample TD3-170612-01-SMB-03 was designated as the duplicate for this SDG. The QAPP specified precision criteria were met. Duplicate results are not evaluated below the reporting limit.
- **G. Dilutions:** All samples with the exception of TD4-170612-01-SMB-01 were analyzed at a dilution to bring the level of Aroclors within the calibration range of the instrument.
- H. Reanalysis: None required for this SDG.
- **Comments:** Due to rounding differences in the software programs used, the values found on the quantitation reports may not match the values found on the sample Form 1s.

This data package was revised to address various client requests (27Apr2018). This data package was further revised to update the Lipids reporting as requested by the client (07May2018).

I certify that this data package is in compliance with the terms and conditions agreed to by **Pace Analytical Services**, **LLC**, and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this completed data package:

| Signed: | Leigh A Begalske  | Date:     | 05/07/18                  |
|---------|-------------------|-----------|---------------------------|
| Name:   | Leigh A. Begalske | Position: | Quality Assurance Auditor |





#### **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Method:

EPA 8082A Mod

Description: 8082A Modified GCT PCB

Client:

General Electric

Date:

May 03, 2018

#### General Information:

6 samples were analyzed for EPA 8082A Mod. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 3541 with any exceptions noted below.

# Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

# **Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 281918

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40151542004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

· MS (Lab ID: 1652258)

PCB-1242 (Aroclor 1242)

## **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

#### **Additional Comments:**

# REPORT OF LABORATORY ANALYSIS



Green Bay, WI 54302 (920)469-2436



# PROJECT NARRATIVE

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Method:

Pace Gender Typing Description: Fish Gender Typing General Electric

Client: Date:

May 03, 2018

#### **General Information:**

6 samples were analyzed for Pace Gender Typing. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

All surrogates were within QC limits with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

# Additional Comments:

# REPORT OF LABORATORY ANALYSIS



Pace Analytical Services, LLC 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

## **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40151542

Method:

Pace Lipid Description: Lipid

Client:

General Electric

Date:

May 03, 2018

#### General Information:

6 samples were analyzed for Pace Lipid. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

# **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

# **Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

| A     | X         | A      | NO       | CHO        | OR               |
|-------|-----------|--------|----------|------------|------------------|
| 1     | 4         | Q      | EA       | $\ddot{u}$ | $\mathcal{L}$    |
| 305 H | est Grand | (venue | Monroele | NI 87645   | Ph: 201-930-9890 |

# **ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY**

COC ID:

COC170612-T11-01

Sample Custodian:

|                         | Street Grand Avanue Mannali, N. 1974-54, Th. 181-181-18199  Client: General Electric Company  Project: Hudson River Remedial Action Monitoring Program |                      |                |                |       |              |        |        |           |           | La                     | ab:                       |                               | Pace - G                      | reen Bay |
|-------------------------|--|----------------------|----------------|----------------|-------|--------------|--------|--------|-----------|-----------|------------------------|---------------------------|-------------------------------|-------------------------------|----------|
| COC<br>Sample<br>Number | Sampling Event ID  | Field Sample ID      | Sample<br>Date | Sample<br>Time | MS/LD | # CONTAINERS | Media* | Prep** | Composite | EPA Split | Total PCBs<br>NE013_09 | Total PCBs<br>5W846 8082A | Percent Lipid<br>(5-GB-0-068) | Fillet Weight<br>(5-GB-L-009) |          |
| 001                     | TD5-170612-01  | TD5-170612-01-SMB-02 | 6/12/2017      | 15:07          |       | 1            | F      | FLRC   |           |           |                        | ~                         | <b>V</b>                      | V                             |          |
| 002                     | TD5-170612-01  | TD5-170612-01-SMB-01 | 6/12/2017      | 15:05          |       | 1            | F      | FLRC   |           |           |                        | >                         | <b>Y</b>                      | >                             |          |
| 003                     | TD5-170612-01  | TD5-170612-01-LMB-08 | 6/12/2017      | 15:02          |       | 1            | F      | FLRC   |           |           |                        | >                         | >                             | >                             |          |
| 004                     | TD5-170612-01  | TD5-170612-01-LMB-07 | 6/12/2017      | 15:00          |       | 1            | F      | FLRC   |           |           |                        | <b>V</b>                  | ~                             | <b>V</b>                      |          |
| 005                     | TD5-170612-01  | TD5-170612-01-LMB-06 | 6/12/2017      | 14:58          |       | 1            | F      | FLRC   |           |           |                        | <b>V</b>                  | V                             | ~                             |          |
| 006                     | TD5-170612-01  | TD5-170612-01-LMB-05 | 6/12/2017      | 14:55          |       | 1            | F      | FLRC   |           |           |                        | <b>Y</b>                  | V                             | V                             |          |
| 007                     | TD5-170612-01  | TD5-170612-01-LMB-04 | 6/12/2017      | 14:54          |       | 1            | F      | FLRC   |           |           |                        | <b>Y</b>                  | ~                             | <b>V</b>                      |          |
| 008                     | TD5-170612-01  | TD5-170612-01-LMB-03 | 6/12/2017      | 14:51          |       | 1            | F      | FLRC   |           |           |                        | <b>V</b>                  | ~                             | <b>V</b>                      |          |
| 009                     | TD5-170612-01  | TD5-170612-01-LMB-02 | 6/12/2017      | 14:49          |       | 1            | F      | FLRC   |           |           |                        | ~                         | <b>V</b>                      | ~                             |          |
| 010                     | TD5-170612-01  | TD5-170612-01-LMB-01 | 6/12/2017      | 14:45          | V     | 1            | F      | FLRC   |           |           |                        | V                         | ~                             | <b>V</b>                      |          |

| 1   | Comments:        |                      |                  |              |                  |              |
|-----|------------------|----------------------|------------------|--------------|------------------|--------------|
| 1   |                  |                      |                  |              |                  |              |
| - [ | Relinguished by: | Received by:         | Relinguished by: | Received by: | Relinguished by: | Received by: |
|     | Signature        | I leles pac          | Signature        | Signature    | Signature        | Signature    |
|     | Print Name       | Print Mame Meetle    | Print Name       | Print Name   | Print Name       | Print Name   |
|     | Company          | Company Race         | Company          | Company      | Company          | Company      |
|     | Date/Time        | Date/Tirge 1317 0930 | Date/Time        | Oate/Time    | Date/Time        | Date/Time    |

Date Printed: 6/12/2017

\* F= FISH

\*\*F=Fillet, WH=Whole Body, O=Offal

COC TYPE: TPCB-LIPD-PEST-MERCURY

Page 1 of 2



| Æ | X | ANC        | HOR |
|---|---|------------|-----|
| 1 | 4 | <b>QEA</b> | HOR |

305 West Grand Avenue Montrale, NJ 07645 Ph. 201-930-9896

# **ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY**

COC ID:

COC170612-T11-01

Sample Custodian:

JER

Lab:

| Cileit. G               | eneral Electric Company | Project: Hudson      | n River Remed  | dial Action M  | onitori | ng Pro       | gram   | <del></del> |           |           | Lâ                     | ab:                       |                               | Pace - G                      | reen Bay | •       |
|-------------------------|-------------------------|----------------------|----------------|----------------|---------|--------------|--------|-------------|-----------|-----------|------------------------|---------------------------|-------------------------------|-------------------------------|----------|---------|
| COC<br>Sample<br>Number | Sampling Event ID       | Field Sample ID      | Sample<br>Date | Sample<br>Time | MS/LD   | # CONTAINERS | Media* | Prep**      | Composite | EPA Split | Total PCBs<br>NE013_09 | Total PCBs<br>SW846 8082A | Percent Lipid<br>(S-GB-O-068) | Fillet Weight<br>(S-GB-L-009) |          |         |
| 011                     | TD4-170612-01           | TD4-170612-01-SMB-04 | 6/12/2017      | 16:19          |         | 1            | F      | FLRC        |           |           |                        | ~                         | V                             | ~                             |          |         |
| 012                     | TD4-170612-01           | TD4-170612-01-SMB-03 | 6/12/2017      | 16:18          |         | 1            | F      | FLRC        |           |           |                        | ~                         | ~                             | ~                             |          | <br>    |
| 013                     | TD4-170612-01           | TD4-170612-01-SMB-02 | 6/12/2017      | 16:17          |         | 1            | F      | FLRC        |           |           |                        | <b>Y</b>                  | ~                             | <b>Y</b>                      |          |         |
| 014                     | TD4-170612-01           | TD4-170612-01-SMB-01 | 6/12/2017      | 16:16          |         | 1            | F      | FLRC        |           |           |                        | ~                         | ~                             | V                             |          | 1-21010 |
| 015                     | TD3-170612-01           | TD3-170612-01-SMB-05 | 6/12/2017      | 16:09          |         | 1            | F      | FLRC        |           |           |                        | <b>✓</b>                  | ~                             | ~                             |          | İ       |
| 016                     | TD3-170612-01           | TD3-170612-01-SMB-04 | 6/12/2017      | 16:07          |         | 1            | F      | FLRC        |           |           |                        | <b>V</b>                  | •                             | <b>✓</b>                      |          |         |
| 017                     | TD3-170612-01           | TD3-170612-01-SMB-03 | 6/12/2017      | 16:05          |         | 1            | F      | FLRC        |           |           |                        | V                         | <b>V</b>                      | <b>V</b>                      |          |         |
| 018                     | TD3-170612-01           | TD3-170612-01-SMB-02 | 6/12/2017      | 16:03          |         | 1            | F      | FLRC        |           |           |                        | ~                         | ~                             | ~                             |          |         |
| 019                     | TD3-170612-01           | TD3-170612-01-SMB-01 | 6/12/2017      | 16:01          |         | 1            | F      | FLRC        |           |           |                        | ~                         | ~                             | <b>V</b>                      |          | 1       |
| 020                     | TD2-170612-01           | TD2-170612-01-SMB-04 | 6/12/2017      | 13:25          |         | 1            | F      | FLRC        |           |           |                        | ~                         | <b>V</b>                      | ~                             |          | -       |

| Comments:        |                    |                  |              |                  |              |
|------------------|--------------------|------------------|--------------|------------------|--------------|
|                  |                    |                  |              |                  |              |
| Belinguished by: | ARaceived by:      | Relinguished by: | Received by: | Relinguished by: | Received by: |
| Signature        | Signature          | Signature        | Signature    | Signature        | Signature    |
| Fint Name        | Print Name Ale the | Print Name       | Print Name   | Print Name       | Print Name   |
| company Fleblex  | Company Pace       | Company          | Company      | Company          | Company      |
| Date/Time        | 100 Tal 3 17 0930  | Date/Time        | Date/Time    | Date/Time        | Date/Time    |

Date Printed: 6/12/2017

\* F= FISH

\*\*F=Fillet, WH=Whole Body, O=Offal

COC TYPE: TPCB-LIPD-PEST-MERCURY

Page 2 of 2

# Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI 1241 Bellevue Street, Suite 9 Green Bay, WI 54302

| Client Name: Hy Chor Courier: Fed Ex F UPS - Client F Pactracking #: 793 8005 Custody Seal on Cooler/Box Present: Fyes   | 2-70        | intact: | ───────────────────────────────────── |                             | 0151542<br>                        |
|--|-------------|---------|---------------------------------------|-----------------------------|------------------------------------|
| ustody Seal on Samples Present: Tyes   |             | intact: | T yes no                              |                             |                                    |
| acking Material:   Bubble Wrap   Bub   |             | None    | ☐ Other                               |                             |                                    |
| hermometer Used SR68   | Type of Ice |         | Blue Dry None                         | •                           | ice, cooling process has begun     |
| Cooler Temperature Uncorr: O /Corr:  | $O_{\perp}$ | Biolog  | ical Tissue is Fr                     |                             |                                    |
| emp Blank Present: yes kno   |             |         |                                       | no                          | Person examining contents:         |
| emp should be above freezing to 6°C.<br>Biota Samples may be received at ≤ 0°C.  | <i>V</i>    |         | Comments:                             |                             | Initials:                          |
| Chain of Custody Present:  | □Yes No.    | □n/a    | 1. printed                            | off.                        | 000001310                          |
| Chain of Custody Filled Out:   | □Yes □No    | □n/a    | 2.                                    |                             |                                    |
| Chain of Custody Relinquished:   | .□Yes .□No  | □N/A    | 3.                                    |                             |                                    |
| Sampler Name & Signature on COC:   | □Yes □No    | □N/A    | 4.                                    |                             |                                    |
| Samples Arrived within Hold Time:  | ₽Yes □No    | □n/a    | 5.                                    |                             |                                    |
| <ul> <li>VOA Samples frozen upon receipt</li> </ul>  | □Yes □No    |         | Date/Time:                            |                             |                                    |
| Short Hold Time Analysis (<72hr):  | □Yes ☑No    | □ N/A   | 6.                                    |                             |                                    |
| Rush Turn Around Time Requested:   | □Yes ØNo    | □N/A    | 7.                                    |                             |                                    |
| Sufficient Volume:   | ØYes □No    | □N/A    | 8.                                    |                             |                                    |
| Correct Containers Used:   | Yes DNo     |         |                                       |                             |                                    |
|  | □Yes □No    | □N/A    |                                       |                             |                                    |
| -Pace Containers Used:   | □Yes □No    |         |                                       |                             |                                    |
| -Pace IR Containers Used:  | DYes DN     |         | 10                                    |                             |                                    |
| Containers Intact:   | □Yes □No    |         |                                       |                             |                                    |
| Filtered volume received for Dissolved tests   | Yes ON      |         |                                       |                             |                                    |
| Sample Labels match COC:   | P Yes UN    |         | 12.                                   |                             |                                    |
| <ul> <li>Includes date/time/ID/Analysis Matrix:</li> <li>All containers needing preservation have been checken</li> </ul>  |             |         | E HN                                  | 03 F H2SO4                  | ☐ NaOH ☐ NaOH +ZnAct               |
| (Non-Compliance noted in 13.)  All containers needing preservation are found to be in compliance with EPA recommendation.  (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)  exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER: | UYes UN     | o ØN/A  | Initial when completed                | Lab Std #ID of preservative | Date/<br>Time:                     |
| Headspace in VOA Vials ( >6mm):  | □Yes □N     |         | -                                     |                             |                                    |
| Trip Blank Present:  | □Yes □N     |         | i                                     |                             |                                    |
| Trip Blank Custody Seals Present   | □Yes □N     | lo ÉNIA |                                       |                             |                                    |
| Pace Trip Blank Lot # (if purchased):  |             |         |                                       | If checked, see atta        | ached form for additional comments |
| Client Notification/ Resolution: Person Contacted:   |             | Date    | /Time:                                |                             |                                    |
| Comments/ Resolution: Only one Cooles &  | 731         | rece    | eved                                  | 673-17                      | Ster                               |

F-GB-C-031-Rev.04 (12Dec2016) SCUR.xls Pace Analytical Services LLC. - Green Bay WI



# **SAMPLE SUMMARY**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.: 40151619

| Lab ID      | Sample ID           | Matrix | Date Collected   | Date Received       |
|-------------|---------------------|--------|------------------|---------------------|
| 40151619001 | SW1-170613-01-YP-05 | Tissue | 06/13/17 16:21   | 06/14/17 15:21 0450 |
| 40151619002 | SW1-170613-01-YP-04 | Tissue | 06/13/17 16:20 🗸 |                     |
| 40151619003 | SW1-170613-01-YP-03 | Tissue | 06/13/17 16:18 🗸 | 06/14/17 15:21      |
| 40151619004 | SW1-170613-01-YP-02 | Tissue | 06/13/17 16:16 🗸 | 06/14/17 15:21      |

# REPORT OF LABORATORY ANALYSIS



# CASE NARRATIVE - PCB ANALYSIS

Lab Report Number (SDG): 40151619 Client: GENERAL ELECTRIC COMPANY

Project Name: HUDSON RIVER REMEDIAL ACTION MONITORING PROGRAM

Project Number: N/A

# 1. RECEIPT

Samples were received on ice at or below 3°C. Following homogenization, tissue samples were kept frozen at less than -10°C until time of preparation for analysis.

# 2. HOLDING TIMES

- A. Sample Preparation: All method and QAPP specified holding times were met.
   B. Sample Analysis: All method and QAPP specified holding times were met.
- 3. METHOD

Preparation: SW-846 3541

Analysis: SW-846 8082A Modified

#### 4. PREPARATION

Sample preparation proceeded normally. All samples went through florisil and acid clean-up procedures prior to analysis.

#### 5. ANALYSIS

- A. Calibration:
  - 1. **Initial verification:** All method acceptance criteria were met.
  - 2. Continuing verification: All method acceptance criteria were met.
- B. Blanks:
  - Method: All acceptance criteria were met for the associated method blanks.
- **C. Surrogates:** All QAPP specified acceptance criteria were met. Surrogate levels are below the lowest calibration level when dilution factors are greater than 10. In the cases where the surrogates are not applicable due to sample dilution, the "S4" data qualifier is applied to the final report.
- D. Spikes:
  - 1. Lab Control Spike (LCS): The control spikes were fortified with Aroclor 1242 and met the QAPP specified accuracy criteria.
  - 2. Matrix Spike (MS): Sample SW1-170613-01-YP-04 was designated as the parent sample for the MS for this SDG and one portion of the sample was fortified with Aroclor 1242. The MS required a 1:2 dilution to bring a non-fortified Aroclor within instrument calibration range. The QAPP specified accuracy criteria were met.
- **E. Samples:** Sample analyses proceeded normally. ZB-1ms is the quantitation column.
- **F. Sample Duplicate:** Sample SW1-170613-01-**Y**P-04 was designated as the duplicate for this SDG. The QAPP specified precision criteria were met. Duplicate results are not evaluated below the reporting limit.
- G. Dilutions: None required for this SDG.
- **H.** Reanalysis: MS 1662165 was initially analyzed straight based on screener data. Upon analysis, the MS was found to require reanalysis at a dilution to bring individual Aroclor peaks within instrument calibration range. The MS was reported with the "1q" data qualifier on the final report to note the occurrence.
- I. Comments: Due to rounding differences in the software programs used, the values found on the quantitation reports may not match the values found on the sample Form 1s.

I certify that this data package is in compliance with the terms and conditions agreed to by **Pace Analytical Services**, **LLC**, and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this completed data package:

| Signed: | Leigh A Begalske  | _ Date:     | 05/14/18                  |
|---------|-------------------|-------------|---------------------------|
| Name:   | Leigh A. Begalske | _ Position: | Quality Assurance Auditor |

40151619 20 of 418





# **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

Date:

May 15, 2018

Samples may have ice meltwater in the ziplock bags.

# **REPORT OF LABORATORY ANALYSIS**



Pace Analytical Services, LLC

1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

# PROJECT NARRATIVE

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

Method:

EPA 8082A Mod

2000111

Description: 8082A Modified GCT PCB

Client: Date: General Electric

May 15, 2018

#### **General Information:**

4 samples were analyzed for EPA 8082A Mod. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Sample Preparation:

The samples were prepared in accordance with EPA 3541 with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

#### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

#### **Additional Comments:**

Analyte Comments:

QC Batch: 283977

1q: Sample was re-analyzed due to incorrect dilution.

- MS (Lab ID: 1662165)
  - PCB-1016 (Aroclor 1016)

# REPORT OF LABORATORY ANALYSIS





# **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION

Pace Project No.:

40151619

Method:

Pace Gender Typing Description: Fish Gender Typing General Electric

Client: Date:

May 15, 2018

#### General Information:

4 samples were analyzed for Pace Gender Typing. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

# Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

# Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

# **Additional Comments:**

# REPORT OF LABORATORY ANALYSIS



Pace Analytical Services, LLC 1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

# **PROJECT NARRATIVE**

Project:

**HUDSON RIVER REMEDIAL ACTION** 

Pace Project No.:

40151619

Method:

Pace Lipid

Client:

Description: Lipid General Electric

Date:

May 15, 2018

#### General Information:

4 samples were analyzed for Pace Lipid. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

# **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

# **Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

N

40151619

ANCHOR QEA ###

# **ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY**

COC ID:

COC170613-T11-06

Sample Custodian:

MCS

|    |                         | erieral Electric Company | Project: Hudsor     | Project: Hudson River Remedial Action Monitoring Program |                |       |              |        |        |           |           | Lab:                   |                           |                               |                               | reen Bay |               |
|----|-------------------------|--------------------------|---------------------|--|----------------|-------|--------------|--------|--------|-----------|-----------|------------------------|---------------------------|-------------------------------|-------------------------------|----------|---------------|
|    | COC<br>Sample<br>Number | Sampling Event ID        | Field Sample ID     | Sample<br>Date   | Sample<br>Time | мѕ/гр | # CONTAINERS | Media* | Prep** | Composite | EPA Split | Total PCBs<br>NED13_09 | Total PCBs<br>SW846 8082A | Percent Lipid<br>(5-G8-0-068) | Fillet Weight<br>(S-GB-L-009) |          | *             |
| N  | 001                     | SW1-170613-01            | SW1-170613-01-YP-05 | 6/13/2017  | 16:21          |       | 1            | F      | FLRC   |           |           |                        | ~                         | V                             | V                             |          | 1-21 Plac     |
| 2  | 002                     | SW1-170613-01            | SW1-170613-01-YP-04 | 6/13/2017  | 16:20          | V     | 1            | F      | FLRC   |           |           |                        | <b>V</b>                  | V                             | V                             |          | 1             |
| 3  | 003                     | SW1-170613-01            | SW1-170613-01-YP-03 | 6/13/2017  | 16:18          |       | 1            | F      | FLRC   |           |           |                        | <b>V</b>                  | V                             | ~                             |          |               |
| 24 | 004                     | SW1-170613-01            | SW1-170613-01-YP-02 | 6/13/2017  | 16:16          |       | 1            | F      | FLRC   |           |           |                        | <b>Y</b>                  | ~                             | ~                             |          | $\mathcal{L}$ |

| Comments:            |                     |                  |              |                  |              |
|----------------------|---------------------|------------------|--------------|------------------|--------------|
| Relinguished by:     | Received by:        | Relinguished by: | Received by: | Relinguished by: | Received by: |
| Signature            | Signature COLOR     | Signature        | Signature    | Signature        | Signature    |
| Print Name           | Print Name Lee Leev | Print Name       | Print Name   | Print Name       | Print Name   |
| Company 2000         | Company Pace        | Company          | Company      | Сотрану          | Company      |
| Date/Time UIUM 19450 | Date/Time 417 0150  | Date/Time        | Date/Time    | Date/Time        | Date/Time    |

Date Printed: 6/13/2017

\* F= FISH

\*\*F=Fillet, WH=Whole Body, O=Offal

COC TYPE: TPCB-LIPD-PEST-MERCURY

Page 1 of 1

# Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI 1241 Bellevue Street, Suite 9 Green Bay, WI 54302

Pace Analytical

|   |                  | Project #:            | WO# : 4                               | 0151619  |
|---|------------------|-----------------------|---------------------------------------|--|
| Client Name: _ Ahchor   |                  |                       |                                       | 0101013  |
| Courier: Fed Ex F UPS - Client F Pac  | e Other:         |                       |                                       |  |
| Tracking #: 786867884126786867  | 884090,78681     | 67884104              | 40151619                              | 14 11 42 411   |
| Custody Seal on Cooler/Box Present yes  | no Seals intact  | yes no                | · · · · · · · · · · · · · · · · · · · | Statement of the second of the |
| Custody Seal on Samples Present: Tyes T   |                  | Tyes no               |                                       |  |
| Packing Material:   Bubble Wrap   Bub   |                  |                       |                                       |  |
| Thermometer Used SI2-10   | Type of Ice: Wet |                       | ,                                     | e, cooling process has begun   |
| Cooler Temperature Uncorr:2, 3, 3 /Corr:2   | 3,3              | gical Tissue is Froze |                                       |  |
| Temp Blank Present: Ves I no Temp should be above freezing to 6°C.                  |                  |                       | no                                    | Person examining contents:   |
| Biota Samples may be received at ≤ 0°C.   | _                | Comments:             | 1                                     | Initials:  |
| Chain of Custody Present:   | Ves □No □N/A     | 1.                    |                                       |  |
| Chain of Custody Filled Out:  | Yes ONO ON/A     | 2.                    |                                       |  |
| Chain of Custody Relinquished:  | □Yes ☑No □N/A    | 3.                    |                                       |  |
| Sampler Name & Signature on COC   | □Yes □No □N/A    | 4.                    |                                       |  |
| Samples Arrived within Hold Time:   | Yes 🗆 No 🗆 N/A   | 5.                    |                                       |  |
| - VOA Samples frozen upon receipt   | ☐Yes ☐No         | Date/Time:            |                                       |  |
| Short Hold Time Analysis (<72hr):   | □Yes ☑NO □N/A    | 6.                    |                                       |  |
| Rush Turn Around Time Requested:  | □Yes □N/A        | 7.                    |                                       |  |
| Sufficient Volume:  | Mes □No □N/A     | 8.                    |                                       |  |
| Correct Containers Used:  | → Tes □No □N/A   | 9.                    |                                       |  |
| -Pace Containers Used:  | □Yes No □N/A     |                       |                                       |  |
| -Pace IR Containers Used:   | □Yes □No □N⁄A    |                       |                                       |  |
| Containers Intact:  | Pres ONO ON/A    | 10.                   |                                       |  |
| Filtered volume received for Dissolved tests  | □Yes □No □N/A    | 11.                   |                                       |  |
| Sample Labels match COC:  | Yes ONO ON/A     | 12.                   |                                       |  |
| -Includes date/time/ID/Analysis Matrix:   | <u>B</u>         |                       |                                       |  |
| All containers needing preservation have been checked. Non-Compliance noted in 13.) | □Yes □No ☑N/A    | 13. F HNO3            | T H2SO4 T                             | NaOH   NaOH +ZnAct   |
| All containers needing preservation are found to be in                              |                  | 13.                   |                                       |  |
| ompliance with EPA recommendation.<br>HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)      | □Yes □No □N/A    |                       |                                       |  |
| xceptions: VOA, coliform, TOC, TOX, TOH, 86G, WIDROW, Phenolics, OTHER:             | □Yes ØNo         | 1                     | o Std #ID of                          | Date/<br>Time:   |
| leadspace in VOA Vials ( >6mm):   | □Yes □No □N/A    | 14.                   | Servative                             | Thirtie.   |
| rip Blank Present:  | □Yes □No ☑N/A    |                       |                                       |  |
| rip Blank Custody Seals Present   | □Yes □No ØN/A    |                       |                                       |  |
| ace Trip Blank Lot # (if purchased):  |                  |                       |                                       |  |
| Client Notification/ Resolution:  |                  |                       | cked, see attached                    | form for additional comments   |
| Person Contacted: Comments/ Resolution:   | Date/            |                       | - 7 ANC (                             | manalist.  |
| Comments/ Resolution. (11 ) CMP   | CI MANE INE      | It water i            | n eiffer                              | 12 C 19 1 1 1 1 1  |
|   |                  |                       |                                       |  |
|   |                  |                       |                                       | ( )  |
| Project Manager Review:   | ANTT             | N                     | Date:                                 | 6/14/17  |
| CD C 031 D 04 (13D 001C) CCID 1   | - ( ) ' -        | 1 7                   |                                       | W   1   1   1   1   1   1   1   1   1  |

F-GB-C-031-Rev.04 (12Dec2016) SCUR.xls Pace Analytical Services LLC. - Green Bay WI



# SAMPLE SUMMARY

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

| Lab ID      | Sample ID               | Matrix | Date Collected   | Date Received  |
|-------------|-------------------------|--------|------------------|----------------|
| 40157940001 | TD5-170828-01-PKSD-02 / | Tissue | 08/28/17 14:11   | 10/04/17 14:05 |
| 40157940002 | TD3-170828-01-PKSD-05   | Tissue | 08/28/17 15:10   | 10/04/17 14:05 |
| 40157940003 | TD3-170828-01-PKSD-04   | Tissue | 08/28/17 15:09   | 10/04/17 14:05 |
| 40157940004 | TD3-170828-01-PKSD-03   | Tissue | 08/28/17 15:07   | 10/04/17 14:05 |
| 40157940005 | TD3-170828-01-PKSD-02   | Tissue | 08/28/17 15:05   | 10/04/17 14:05 |
| 40157940006 | TD2-170828-01-PKSD-02   | Tissue | 08/28/17 12:19   | 10/04/17 14:05 |
| 40157940007 | TD2-170828-01-PKSD-01   | Tissue | 08/28/17 12:15   | 10/04/17 14:05 |
| 40157940008 | TD1-170828-01-PKSD-05   | Tissue | 08/28/17 12:00 - | 10/04/17 14:05 |
| 40157940009 | TD1-170828-01-PKSD-04   | Tissue | 08/28/17 11:58   | 10/04/17 14:05 |
| 40157940010 | TD1-170828-01-PKSD-03   | Tissue | 08/28/17 11:56   | 10/04/17 14:05 |
| 40157940011 | TD1-170828-01-PKSD-02   | Tissue | 08/28/17 11:53   | 10/04/17 14:05 |
| 40157940012 | ND2-170828-01-PKSD-04   | Tissue | 08/28/17 17:51   | 10/04/17 14:05 |
| 40157940013 | ND2-170828-01-PKSD-03   | Tissue | 08/28/17 17:50   | 10/04/17 14:05 |
| 40157940014 | ND2-170828-01-PKSD-02   | Tissue | 08/28/17 17:48   | 10/04/17 14:05 |
| 40157940015 | ND2-170828-01-GOSH-02   | Tissue | 08/28/17 17:58   | 10/04/17 14:05 |
| 40157940016 | ND1-170828-01-PKSD-06   | Tissue | 08/28/17 17:41   | 10/04/17 14:05 |
| 40157940017 | ND1-170828-01-PKSD-05   | Tissue | 08/28/17 17:40   | 10/04/17 14:05 |
| 40157940018 | ND1-170828-01-PKSD-03   | Tissue | 08/28/17 17:36   | 10/04/17 14:05 |
| 40157940019 | ND1-170828-01-PKSD-02   | Tissue | 08/28/17 17:35   | 10/04/17 14:05 |
| 40157940020 | ND1-170828-01-PKSD-01   | Tissue | 08/28/17 17:33   | 10/04/17 14:05 |

# REPORT OF LABORATORY ANALYSIS



# CASE NARRATIVE - PCB ANALYSIS

Lab Report Number (SDG): 40157940 Client: GENERAL ELECTRIC COMPANY

Project Name: HUDSON RIVER REMEDIAL ACTION MONITORING PROGRAM

Project Number: N/A

### 1. RECEIPT

Samples were received on ice at or below 1°C. Following homogenization, tissue samples were kept frozen at less than -10°C until time of preparation for analysis.

# 2. HOLDING TIMES

A. Sample Preparation: All method and QAPP specified holding times were met.

B. Sample Analysis: All method and QAPP specified holding times were met.

# 3. METHOD

Preparation: SW-846 3541

Analysis: SW-846 8082A Modified

#### 4. PREPARATION

Sample preparation proceeded normally. All samples went through florisil and acid clean-up procedures prior to analysis.

#### 5. ANALYSIS

- A. Calibration:
  - 1. Initial verification: All method acceptance criteria were met.
  - 2. Continuing verification: All method acceptance criteria were met.
- B. Blanks:
  - Method: All acceptance criteria were met for the associated method blanks.
- C. Surrogates: All QAPP specified acceptance criteria were met. Surrogate levels are below the lowest calibration level when dilution factors are greater than 10. In the cases where the surrogates are not applicable due to sample dilution, the "S4" data qualifier is applied to the final report.
- D. Spikes:
  - 1. Lab Control Spike (LCS): The control spikes were fortified with Aroclor 1242 and met the QAPP specified accuracy criteria.
  - 2. Matrix Spike (MS): Sample ND2-170828-01-GOSH-02 was designated as the parent sample for the MS for this SDG and one portion of the sample was fortified with Aroclor 1242. The MS required a 1:20 dilution to bring a non-fortified Aroclor within instrument calibration range. Spike levels are below the lowest calibration level when dilution factors are greater than five; therefore, the accuracy criteria for the MS are not applicable. The "M6" data qualifier was applied to the parent result on the final report. Batch QC was also analyzed with this SDG.
- E. Samples: Sample analyses proceeded normally. ZB-1ms is the quantitation column.
- F. Sample Duplicate: Sample ND2-170828-01-GOSH-02 was designated as the duplicate for this SDG. The QAPP specified precision criteria were met. Batch duplicates were also analyzed with this SDG. Duplicate results are not evaluated below the reporting limit.
- **G. Dilutions:** All samples of this SDG were analyzed at a dilution to bring the level of Aroclors within the instrument calibration range.
- H. Reanalysis: Samples TD3-170828-01-PKSD-02 and ND2-170828-01-PKSD-03 were initially analyzed diluted based on screener data. Upon analysis, the samples were found to require reanalysis at different dilutions to bring individual Aroclor peaks within instrument calibration range. The samples were reported with the "1q" data qualifier on the final report to note the occurrence.
- I. Comments: Due to rounding differences in the software programs used, the values found on the quantitation reports may not match the values found on the sample Form 1s.

40157940 42 of 859

| Pace Analytical* |  |
|------------------|--|
| 1                |  |

40157940

I certify that this data package is in compliance with the terms and conditions agreed to by **Pace Analytical Services**, **LLC**, and by the client, both technically and for completeness, except for the conditions detailed above. The Laboratory Manager or his designee, as verified by the following signature, has authorized release of the data contained in this completed data package:

| Signed: | Leigh A Begalske  | Date:     | 05/15/18                  |
|---------|-------------------|-----------|---------------------------|
|         | O O               |           |                           |
| Name:   | Leigh A. Begalske | Position: | Quality Assurance Auditor |

43 of 859





#### PROJECT NARRATIVE

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.: 40157940

Method: EPA 8082A Mod

Description: 8082A Modified GCT PCB

Client: General Electric

Date: May 10, 2018

#### General Information:

20 samples were analyzed for EPA 8082A Mod. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3541 with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: 286769

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

• ND1-170828-01-PKSD-02 (Lab ID: 40157940019)

- Decachlorobiphenyl (S)
- Tetrachloro-m-xylene (S)
- ND1-170828-01-PKSD-05 (Lab ID: 40157940017)
  - · Decachlorobiphenyl (S)
  - Tetrachloro-m-xylene (S)
- ND1-170828-01-PKSD-06 (Lab ID: 40157940016)
  - · Decachlorobiphenyl (S)
  - Tetrachloro-m-xylene (S)
- ND2-170828-01-PKSD-02 (Lab ID: 40157940014)
  - Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- ND2-170828-01-PKSD-03 (Lab ID: 40157940013)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- ND2-170828-01-PKSD-04 (Lab ID: 40157940012)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- TD1-170828-01-PKSD-04 (Lab ID: 40157940009)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- TD1-170828-01-PKSD-05 (Lab ID: 40157940008)
  - · Decachlorobiphenyl (S)
  - Tetrachloro-m-xylene (S)

7101

# REPORT OF LABORATORY ANALYSIS



Page 7 of 41



#### **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Method:

EPA 8082A Mod

Client:

Description: 8082A Modified GCT PCB

Date:

General Electric

May 10, 2018

QC Batch: 286769

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- TD3-170828-01-PKSD-02 (Lab ID: 40157940005)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- TD3-170828-01-PKSD-03 (Lab ID: 40157940004)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- TD3-170828-01-PKSD-04 (Lab ID: 40157940003)
  - Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- TD3-170828-01-PKSD-05 (Lab ID: 40157940002)
  - Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)

QC Batch: 287324

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- DUP (Lab ID: 1681911)
  - Decachlorobiphenyl (S)
  - Tetrachloro-m-xylene (S)
- MS (Lab ID: 1681430)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)
- ND2-170828-01-GOSH-02 (Lab ID: 40157940015)
  - · Decachlorobiphenyl (S)
  - · Tetrachloro-m-xylene (S)

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 286769

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40158013010

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- · MS (Lab ID: 1677645)
  - PCB-1242 (Arocfor 1242)

QC Batch: 287324

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40157940015

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

• MS (Lab ID: 1681430)

# REPORT OF LABORATORY ANALYSIS

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7 of 859 40157940





# **PROJECT NARRATIVE**

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

40157940

Method:

EPA 8082A Mod

Client:

Description: 8082A Modified GCT PCB

General Electric

Date:

May 10, 2018

QC Batch: 287324

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40157940015

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

• PCB-1242 (Aroclor 1242)

# **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

#### **Additional Comments:**

Analyte Comments:

QC Batch: 286769

1q: Sample was re-analyzed due to incorrect dilution.

- ND2-170828-01-PKSD-03 (Lab ID: 40157940013)
  - PCB-1016 (Aroclor 1016)
- TD3-170828-01-PKSD-02 (Lab ID: 40157940005)
  - PCB-1016 (Aroclor 1016)

# REPORT OF LABORATORY ANALYSIS





# PROJECT NARRATIVE

Project:

HUDSON RIVER REMEDIAL ACTION M

Pace Project No.:

Description: Lipid

40157940

Method:

Pace Lipid

Client:

General Electric

Date:

May 10, 2018

#### General Information:

20 samples were analyzed for Pace Lipid. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

#### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

#### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

#### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

#### Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

#### Surrogates:

All surrogates were within QC limits with any exceptions noted below.

#### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

#### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

#### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

# **Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 286925

R1: RPD value was outside control limits.

• DUP (Lab ID: 1678325)

• Lipid

# Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

# REPORT OF LABORATORY ANALYSIS

see firm

| A X            | AN         | CHO            | OR               |
|----------------|------------|----------------|------------------|
| V.             | QEA        | 1 2            |                  |
| 305 West Grand | venue Mont | vale, NJ 07645 | Ph: 201-930-9890 |

# **ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY**

40157940

COC170828-T11-02 COC ID:

| Sa | ample | Custodia | n: | S |
|----|-------|----------|----|---|
|    |       |          |    |   |

| Client: G               | eneral Electric Company | Project: Hudson       | Project: Hudson River Remedial Action Monitoring Program |                |       |              |        |        |           |           |                        | D:                        | Pace - Green Bay              |                               |    | ı    |     |
|-------------------------|-------------------------|-----------------------|--|----------------|-------|--------------|--------|--------|-----------|-----------|------------------------|---------------------------|-------------------------------|-------------------------------|----|------|-----|
| COC<br>Sample<br>Number | Sampling Event ID       | Field Sample ID       | Sample<br>Date   | Sample<br>Time | MS/LD | # CONTAINERS | Media* | Prep** | Composite | EPA Split | Total PCBs<br>NE013_09 | Total PCBs<br>SW846 8082A | Percent Lipid<br>(5-GB-O-068) | Fillet Weight<br>(5-GB-L-009) |    |      | ,   |
| 001                     | TD5-170828-01           | TD5-170828-01-PKSD-02 | 8/28/2017  | 14:11          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               | 1- | ZIPI | lac |
| 002                     | TD3-170828-01           | TD3-170828-01-PKSD-05 | 8/28/2017  | 15:10          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               |    | 1    |     |
| 003                     | TD3-170828-01           | TD3-170828-01-PKSD-04 | 8/28/2017  | 15:09          |       | 1            | F      | WH     |           |           | . []                   | <b>Y</b>                  | ~                             |                               |    |      |     |
| 004                     | TD3-170828-01           | TD3-170828-01-PKSD-03 | 8/28/2017  | 15:07          |       | 1            | F      | WH     |           |           |                        | ~                         | V                             |                               |    |      |     |
| 005                     | TD3~170828-01           | TD3-170828-01-PKSD-02 | 8/28/2017  | 15:05          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               |    |      |     |
| 006                     | TD2-170828-01           | TD2-170828-01-PKSD-02 | 8/28/2017  | 12:19          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               |    |      |     |
| 007                     | TD2-170828-01           | TD2-170828-01-PKSD-01 | 8/28/2017  | 12:15          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               |    |      |     |
| 008                     | TD1-170828-01           | TD1-170828-01-PKSD-05 | 8/28/2017  | 12:00          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               |    |      |     |
| 009                     | TD1-170828-01           | TD1-170828-01-PKSD-04 | 8/28/2017  | 11:58          |       | 1            | F      | WH     |           |           |                        | ~                         | ~                             |                               |    |      |     |
| 010                     | TD1-170828-01           | TD1-170828-01-PKSD-03 | 8/28/2017  | 11:56          |       | 1            | F      | WH     |           |           |                        | Y                         | V                             |                               |    | 1    |     |

| Comments:  |  |  |                     |  |  |         |          |
|--|--|--|---------------------|--|--|---------|----------|
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| Date/Time 8/29/17  | Date/Time 8729/17 1030   | Date/Time 8/29/17 1115   | Date/Dime /17 11:15 | Date/Time 10/3/17 16:00  | Date 5 14/17 1405                            | 10/4/17 | 1405     |
| marinete e commentation de la commentación de la co | (Control of the control \$1500 PBB . 17 ST\$\$1500 PBB PBB PBB PBB PBB PBB PBB PBB PBB P |                     | errogen (1988) i 1984 (1984) errogen (1986) (1984) errogen (1985) errogen (1986) errogen (1986) errogen (1986) | · "我们是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个 | 101     |          |

Date Printed: 8/28/2017

\* F== FISH

\*\*F=Fillet, WH=Whole Body, O=Offal

COC TYPE: TPCB-LIPD-PEST-MERCURY

Page 1 of 2

| 1 % | ANCHOR<br>QEA **** |  |  |  |  |  |  |
|-----|--------------------|--|--|--|--|--|--|
| V.  | QEA 💥              |  |  |  |  |  |  |

# **ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY**

COC ID:

COC170828-T11-02

Sample Custodian:

SA

|                         | eneral Electric Company | Project: Hudson       | River Remed    | dial Action M  | lonitori | ng Pro       | gram   |        |           |               | La                     | ıb:                       | ·                             | Pace - G                      | reen Bay |     |    |
|-------------------------|-------------------------|-----------------------|----------------|----------------|----------|--------------|--------|--------|-----------|---------------|------------------------|---------------------------|-------------------------------|-------------------------------|----------|-----|----|
| COC<br>Sample<br>Number | Sampling Event ID       | Field Sample ID       | Sample<br>Date | Sample<br>Time | MS/LD    | # CONTAINERS | Media* | Prep** | Composite | EPA Split     | Total PCBs<br>NE013_09 | Total PCBs<br>SW846 8082A | Percent Lipid<br>(S-GB-0-068) | Fillet Weight<br>(S-GB-L-009) |          |     | 4  |
| 011                     | TD1-170828-01           | TD1-170828-01-PKSD-02 | 8/28/2017      | 11:53          |          | 1            | F      | WH     |           |               |                        | Y                         | ~                             | L                             | 1-       | ZIP | oc |
| 012                     | ND2-170828-01           | ND2-170828-01-PKSD-04 | 8/28/2017      | 17:51          |          | 1            | F      | WH     |           |               |                        | >                         | >                             |                               |          | 1   |    |
| 013                     | ND2-170828-01           | ND2-170828-01-PKSD-03 | 8/28/2017      | 17:50          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          | ]   |    |
| 014                     | ND2-170828-01           | ND2-170828-01-PKSD-02 | 8/28/2017      | 17:48          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          |     |    |
| 015                     | ND2-170828-01           | ND2-170828-01-GOSH-02 | 8/28/2017      | 17:58          | V        | 1            | F      | WH     | ~         | Total Control |                        | ~                         | ~                             |                               |          |     |    |
| 016                     | ND1-170828-01           | ND1-170828-01-PKSD-06 | 8/28/2017      | 17:41          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          |     |    |
| 017                     | ND1-170828-01           | ND1-170828-01-PKSD-05 | 8/28/2017      | 17:40          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          | 1 1 |    |
| 018                     | ND1-170828-01           | ND1-170828-01-PKSD-03 | 8/28/2017      | 17:36          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          |     |    |
| 019                     | ND1-170828-01           | ND1-170828-01-PKSD-02 | 8/28/2017      | 17:35          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          |     |    |
| 020                     | ND1-170828-01           | ND1-170828-01-PKSD-01 | 8/28/2017      | 17:33          |          | 1            | F      | WH     |           |               |                        | ~                         | ~                             |                               |          | 1 5 |    |

|  |                        | k .                    |                       |  |                      |          |
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| Print Name Jin Kyan  | Print Name             | Print Name D. Bubast   | Prin Name<br>A-BIHTAG | Print Name   | Print Name           | SUSANT   |
| Company Anchor DEA   | Company PACE           | Company                | Company ( T:-1.6°(    | Company<br>PACE  | Company 4            | Parl     |
| Date/Time 8/29/17  | Date/Time 8/29/11 1030 | Date/Time 8/24/17 1115 | 3/39/17 11:15         | Date/Time<br>10/3/17 16:00   | Date/fine/0/4/17 146 | 1510/1/2 |
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Date Printed: 8/28/2017

Comments:

\* F= FISH

\*\*F=Fillet, WH=Whole Body, O=Offal

COC TYPE: TPCB-LIPD-PEST-MERCURY

Page 2 of 2

40157940

Pace Analytical Services, LLC. - Green Bay WI

|  | Sample Co                                     | maiti  | on opon kec                       | aihr                           | 1241 Bellevue Street,<br>Green Bay, WI |
|--|---|--------|-----------------------------------|--------------------------------|--|
| Pace Analytical  |   |        | Project (                         | LIOH · AA                      | 0157940                                |
| Client Name:   |   |        |                                   | MOH · 4                        | 01313 <del>1</del> 0                   |
| Courier: Fed Ex T UPS - Client Page  | ce Other:                                     |        |                                   |                                |  |
| Tracking #: 409 994704755; 409   | 19470 4                                       | Tuk;   | ·                                 | 40157940                       | 11 441 4 412                           |
| Custody Seal on Cooler/Box Present/ Cyes   |   |        |                                   | T                              |  |
| Custody Seal on Samples Present: Tyes 🛭  |   |        | f yes no                          |                                |  |
| Packing Material:   Bubble Wrap   Bub  |   |        |                                   |                                | . Province and has been no             |
| Thermometer Used SCOO  | 7   |        | Blue Dry None gical Tissue is Fro | ,                              | ice, cooling process has begun         |
| Cooler Temperature Uncorr: 1 / / / / / / / / / / / / / / / / / /                       | <u>~}                                    </u> |        | gical rissue is ric               | r no [                         | Person examining contents              |
| Temp Blank Present:  yes /no Temp should be above freezing to 6°C.                     | <b>/</b>                                      |        |                                   | ,                              | Date: 10-4-17                          |
| Biota Samples may be received at ≤ 0°C.  |   |        | Comments:                         |                                | Initials:                              |
| Chain of Custody Present:  | ØYes □No                                      | □n/a   | 1.                                |                                |  |
| Chain of Custody Filled Out:   | ØYes □No                                      | □n/a   | 2.                                |                                |  |
| Chain of Custody Relinquished:   | ØYes □No                                      | □n/a   | 3.                                |                                |  |
| Sampler Name & Signature on COC:   | □Yes ØNo                                      | □n/a   | 4.                                |                                |  |
| Samples Arrived within Hold Time:  | Yes □No                                       | □N/A   | 5.                                |                                |  |
| - VOA Samples frozen upon receipt  | □Yes □No                                      |        | Date/Time:                        |                                |  |
| Short Hold Time Analysis (<72hr):  | □Yes 🗖 No                                     | □n/a   | 6.                                |                                |  |
| Rush Turn Around Time Requested:   | □Yes ØÑo                                      | □n/A   | 7.                                |                                |  |
| Sufficient Volume:   | Yes 🗆 No                                      | □n/a   | 8.                                |                                |  |
| Correct Containers Used:   | Yes □No                                       | □n/a   | 9.                                |                                |  |
| -Pace Containers Used:   | □Yes ØNo                                      | □n/A   |                                   |                                |  |
| -Pace IR Containers Used:  | □Yes □No                                      | ØN/A   |                                   |                                |  |
| Containers Intact:   | ZYes □No                                      | □N/A   | 10.                               |                                |  |
| Filtered volume received for Dissolved tests   | □Yes □No                                      | DAIA   | 11.                               |                                |  |
| Sample Labels match COC:   | Ves □No                                       | □n/a   | 12.                               |                                |  |
| -Includes date/time/ID/Analysis Matrix:  | 1 B   |        |                                   |                                |  |
| All containers needing preservation have been checked<br>(Non-Compliance noted in 13.) | l.<br>□Yes □No                                | ØN/A   | 13. T HNO3                        | B F H2SO4 F                    | - NaOH   NaOH +ZnAc                    |
| All containers needing preservation are found to be in                                 |   |        | 13.                               |                                |  |
| compliance with EPA recommendation.<br>(HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)       | □Yes □No                                      | 7N/A   |                                   |                                |  |
| exceptions: VOA, coliform, TOC, TOX, TOH, D&G, WIDROW, Phenolics, OTHER:               | □Yes ØNo                                      |        | Initial when completed            | Lab Std #ID of<br>preservative | Date/<br>Time:                         |
| Headspace in VOA Vials ( >6mm):  | □Yes □No                                      | N/A    |                                   | P. 2001.10.10                  |  |
| Trip Blank Present:  | Yes No  |        |                                   | ,,,,                           |  |
| Trip Blank Custody Seals Present   | □Yes □No                                      | ,      |                                   |                                |  |
| Pace Trip Blank Lot # (if purchased):  |   |        |                                   |                                |  |
| Client Notification/ Resolution:   | · · · · · · · · · · · · · · · · · · ·         | 1      | If (                              | checked, see attach            | ed form for additional comments        |
| Person Contacted:  |   | _Date/ | Time:                             |                                |  |
| Comments/ Resolution:  |   |        |                                   |                                |  |
|  |   |        |                                   |                                |  |
|  |   |        |                                   |                                |  |
| Project Manager Review:  | Lfor  | T      |                                   | Date:                          | 10-5-17                                |

F-GB-C-031-Rev.04 (12Dec2016) SCUR.xls Pace Analytical Services LLC. - Green Bay W1

# **SECTION 6**

# PROJECT CORRESPONDENCE

# Meg Michell

From:

Tod Noltemeyer <Tod.Noltemeyer@pacelabs.com>

Sent:

Friday, April 6, 2018 2:47 PM

To:

Mark Meyers; David Blye; Meg Michell

Cc:

Jared K. Acker; Chris Haase; Kate Verbeten; Leigh Begalske; Mary Christie

Subject:

RE: GE Fish sample batch 40151542 - revised

# Meg/David,

You have requested that we report results in two significant figures. That appears to be doable.

Does that apply just to the results, or also other things that are presented in data reports like RL, MDL and QC limits? Those functions may be a bit more challenging to change.

Thanks, Tod

# **Tod Noltemeyer**

**Project Manager** 

Pace Analytical Services, LLC

1241 Bellevue St.

Green Bay, WI 54302

608-232-3300 920-469-2436

www.pacelabs.com

# >>> Meg Michell <mmichell@envstd.com> 4/3/2018 8:51 AM >>>

Please see the attached based on a review of the revised data package. There are a few last items to revise/discuss. Please let us know when you have a chance to review.

Thanks!

......

From: Tod Noltemeyer [mailto:Tod.Noltemeyer@pacelabs.com]

Sent: Thursday, March 29, 2018 10:29 AM

To: Mark Meyers <mmeyers@anchorqea.com>; David Blye <DBLYE@envstd.com>; Meg Michell

<mmichell@envstd.com>

**Cc:** Chris Haase < Chris. Haase@pacelabs.com>; Kate Verbeten < Kate. Verbeten@pacelabs.com>; Leigh Begalske

<Leigh.Begalske@pacelabs.com>; Mary Christie <Mary.Christie@pacelabs.com>

Subject: GE Fish sample batch 40151542 - revised

Attached is a new and improved level 4 data package for GE fish sample batch 40151542. Please review and let us know if all is ok. If so we will then crank out many more packages.

Thanks, Tod

# **Tod Noltemeyer**

Project Manager

Pace Analytical Services, LLC

1241 Bellevue St.

Green Bay, WI 54302

608-232-3300 920-469-2436

www.pacelabs.com

Review of 40151542\_pkg\_pcb\_rev data package compared to notes sent to Green Bay on 3/14/18

# SDG Narrative (GE Fish EDDs sample batch 40151542)

- States "Sample Preparation: The samples were kept frozen prior to extraction, therefore
  the sample hold-time criteria is not applicable." However, the QAPP holding time is 1
  year to extraction when frozen. Please correct.
  This was corrected.
- States "Surrogates: All in-house acceptance criteria were met. The surrogates are only
  evaluated on the quantitation column." We use a single column analysis this sounds
  like there is a confirmation column, please correct.
  Changed to

C. Surrogates: All **in-house** acceptance criteria were met. This should be changed to **QAPP** acceptance criteria

- States "Samples: Sample analyses proceeded normally. RTX-CLP is the quantitation column. RTXCLP2 (RTX-CLP II) is the confirmation column." Please correct as any reference to the columns should be ZB-1 or DB-1, as appropriate, and this is a single column analysis.
   This was corrected.
- States "Sample Duplicate: Sample TD3-170612-01-SMB-03 was designated as the duplicate for this SDG. The in-house precision criteria were met with the following exception. The precision criteria were not met for Aroclor 1260; the "D6" data qualifier was applied to the parent result on the final report. Duplicate results are not evaluated below the reporting limit." Duplicate form uses incorrect criteria (see below) the project criteria was met. Chris Haase indicated that the analysis code would be updated to use project criteria. Please correct.
  This was corrected.

# **Duplicate Summary**

States RPD limits is 0-30%. This does not match project criteria. Project criteria from QAPP is: The RPD for lab duplicates should be ≤40% for results >5× the RL. The difference between results should be ≤ 2× the RL when at least one result is ≤5× the RL. Chris Haase indicated that the analysis code would be updated to use project criteria. This was corrected.

# **Initial Calibration**

- A1232 appears to be a single point calibration. All Aroclors are to be a 5 point calibration as per your SOP Section 13 table and historical data. As discussed with David Blye, if you are going to report A1232 (which should be rare to non-existent for GE Hudson River fish), then you will have to complete a full 5-point calibration for A1232 and then re-inject the sample extract. This was covered in our call on 3/16/18.
- There is not a summary form for the following criteria: SOP Section 11.4.6. Once linear
  calibration has been established it is subjected to an additional check. This check is the
  comparison of the calculated amount of the low calibration standard for each 5 point

Aroclor against the expected amount of the standard using the % difference. Can a summary for be added for this assessment?

CRDL / RL Verification forms and data were added to the revised data package. However, we are looking for a summary form of the differences between the calculated (or on-col amount) vs the expected amount (or cal amount) for each peak in each Aroclor low standard used in the initial calibration.

|       |           |              | AMOUN                    | T3      |            |              | 1 3 4       |
|-------|-----------|--------------|--------------------------|---------|------------|--------------|-------------|
|       |           |              | CAL-AMI                  | ON-COL  |            |              | •           |
| RI    | EXP RT    | DLT RT       | RESPONSE (ug/ml)         | (ug/ml) | TARGET RAN | GE RATIO     | REVIEW CODE |
|       |           |              |                          |         |            |              |             |
| 1     | Aroclor 1 | 1221         |                          | CAS #:  | 11104-28-2 |              |             |
| 1.804 | 1.804     | 0.800        | 100196 0.10000           | 0.11    | 8.00- 28.  | 00 100.00(M) | EA          |
| 2.407 | 2.487     | 0.000        | 59605 0.10000            | 0.11    | 0.00- 20.  | 00 57.76     | EA          |
| 2.689 | 2.688     | 0.001        | 132885 0.10000           | 8.11    | 0.00- 20.  | 00 128.77    | BA          |
| 2.789 | 2.789     | 0.000        | 100106 0.10000           | 0.13    | 0.00- 20.  | 00 99.91     | BA          |
| 2.852 | 2.851     | 0.001        | 299883 8.10000           | 0.10    | 8.88- 20.  | 00 289.32    | BA          |
|       |           | Average of P | eak Ampunto <del>-</del> | 0.18600 |            |              |             |
|       |           |              |                          |         |            |              |             |

# Raw data

Scaling on "zoomed in" chromatogram starts at 4 minutes which cuts off TCMX, A1221, A1232, and A1242 in samples and standards. Can a zoomed in chromatogram of this area also be provided? There are no pages displaying these peaks even for the A1221, A1232, and A1242 calibration standards. This area is not visible in the smaller (before/after manual integration) chromatograms provided and, for standards (e.g., pages 96, 100, 124, 154, 202, etc.) does not seem to include meaningful information due to the scaling used. Please fix the scaling on these chromatograms as well as provide the larger/zoomed in chromatograms for the earlier part of the chromatograms. This was corrected. There will likely be instances in the future when a "zoomed in" or "blown up" chromatogram is requested when a trace-level Aroclor is reported.

Raw data "Sample Matrix" listed as SOIL for samples instead of tissue as on forms-can this be corrected?

This was corrected.

- "Zoomed in" chromatogram lists RTX-CLP column and 0.32 diameter, which must be corrected to ZB-1 or DB-1, as appropriate. This was corrected.
- Do not see screen log with predicted dilutions in the data package as per our discussion when we were at the lab.
   This was corrected.

### •

Extraction Log

Lot number provided for Tuna although tuna was not used for QC – please remove
 This was corrected

 Lot number for hexane but not for acetone – please add a field for this and add lot # for completed data if possible

This was corrected.

Reviewed by/Reviewed by date is incomplete. Please complete. This was corrected.

# Lipids

- Method blank summary (page 413) displays result as 0.0 vs 0.03 U. This was corrected.
- Duplicate summary states control limit to be 20%. Project criteria from QAPP is: The RPD for lab duplicates should be ≤40% for results >5× the RL. The difference between results should be ≤ 2× the RL when at least one result is ≤5× the RL. If possible, please use project criteria.

This was corrected.

- Reviewed by/Reviewed by date is incomplete on Lipids raw data. Please complete. This was corrected.
- The lipids logs state that 1 mL of a 10 mL "sample" (extract final) volume was taken for the lipids analysis. It is actually 1 mL of 5 mL extract final volume. The lipids should be ½ the reported values due to this discrepancy –the reported 10 mL is being used instead of the actual 5 mL in the calculation.

This was corrected

# 14. Data Analysis and Calculations

14.1. Fish and other biota samples typically require a percent lipid analysis, see Section 12.4. The lipid content is calculated utilizing the below equation:

> % Lipids = (Final Weight –Initial Weight) X X 100 Sample Weight Extracted Volume (1mL)

# Biota Prep Log

 The "Left/Both fillet" field is not completed for all fish. These should all be left only. There "is an "X" through the "left" for the first 2 fish-note should be added to clarify that this means left only filet.

The "Left/Both fillet" field has now been completed the fish that were not complete before (by circling "left") and a footnote was added to clarify that it is left only filet for these

# Other

- (by circling "left") and a footnote was added to clarify that it is left only filet for the first 2 fish also means that it is the left only filet.

  Results are reported to 3 significant figures instead of historical 2 significant figures. Is 3 significant figures supported by 5 mL final volume (is it accurate to 5.00?). Does your system have the ability to adjust to 2 significant figures for results?

  Results are 3 sig figs, was this change unable to be implemented?
- The dilutions being performed are higher than historical data. This appears to be because the dilutions are based on the highest individual peak vs the total area of the

Aroclor. The top of calibration range is 1 ppm for a 10 g sample. Data includes 3-5-fold dilutions for Aroclors just over 1 ppm and 10-fold dilutions for Aroclors under 2 ppm. There appears to be more "J" values than typically observed due to this change. Should discuss. Also, understand that surrogate recoveries are evaluated up to 10-fold dilution (historical used 5-fold for this evaluation). May need AQ to adjust DVM (if possible) due to the number of dilutions over 5 (there was only 1 dilution greater than 5 in 2016 fish at it was a 6-fold dilution).

This was covered in our call on 3/16/18.

 GE Fish sample batch 40148598GE Fish sample batch 40148598 - These would have been reported with peak 20 taken out of A1254 at Schenectady vs A1260 as was done at Pace GB; A1260 "step peaks" are present; peak 21 is greater in height then all A1254 peaks (except 20). This change would only result in very minor changes to Total PCB but would be more consistent with TZ STB historical quantitation. Should discuss. This was covered in our call on 3/16/18, ongoing guidance with lab.

or changes to Total PC tion. Should discuss. th lab.

# Jared K. Acker

From:

Tod Noltemeyer < Tod. Noltemeyer@pacelabs.com>

Sent:

Thursday, May 31, 2018 5:54 PM

To: Cc:

Meg Michell Jared K. Acker

Subject:

Re: FW: SDG 40148598 requests

Our QA group revised the data package which is now available on Paceport. They apologize - this was one of the first sets we went back and forth on while setting up the process and a couple items did not get updated.

Tod

# Tod Noltemeyer

Project Manager

Pace Analytical Services, LLC

1241 Bellevue St.

Green Bay, WI 54302

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>>> Meg Michell <mmichell@envstd.com> 5/31/2018 2:55 PM >>> Could you address the following requests for this SDG? Thanks!!

From: Jared K. Acker

Sent: Thursday, May 31, 2018 9:02 AM
To: Meg Michell <a href="mailto:mmichell@envstd.com">mmichell@envstd.com</a>

Subject: SDG 40148598 requests

# Good morning

Here are my requests for this SDG:

- 1) The raw data for Laboratory Duplicate Lab ID 1653813 / File ID 030718.B\030718027.D does not match the Form I or Form III results
- 2) The COC time received was not filled in, can this be confirmed and corrected?

Thanks

Jared Acker Staff Chemist II

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